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FOR IMMEDIATE RELEASE

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GRASSHOPPER WARNING

Beware of severe grasshopper damage this spring!

Michael Dolinski, entomologist and pest control specialist with Alberta Agriculture, urges farmers in forecast areas to start checking immediately for newly hatched grasshoppers. Because of the abnormally early spring and dry soil conditions, he expects the grasshopper hatch to be earlier this year than ever before. He also expects it to be exceptionally high since most of the eggs came through the warm winter in very good condition.

Mr. Dolinski points out that present weather conditions are ideal for the grasshoppers,and that damage could be severe, even in those areas of the province that are forecast to have only moderate or light infestations,unless control measures are taken. The two main factors pointing to a potentially serious problem are the abnormally early hatch and dry soil conditions. The early hatch means that the grasshoppers will get a head start on the crop, and the dry conditions mean that crop growth could easily be retarded. Since there is very little vegetation this spring along roadsides and in headlands, where the grasshoppers hatch, they will move into the crops as soon as the seedlings emerge.

This is the dark side of the picture. The brighter side is that all the grasshopper eggs are likely to hatch within a 10-day period. This means that one or two spraying operations

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Grasshopper Warning (cont'd)

should be sufficient to bring the situation under control for the whole season, compared with most years when spraying often has to be done every week to 10 days over a two-month period. In other words, control should be better, and it should be cheaper this year.

"If the grasshoppers have already started to invade the edges of adjacent fields by the time they are discovered, spray both the edges of the fields and the egg beds," Mr. Dolinski says. "Just spraying the edges of the fields will not solve the problem. Under some circumstances it may be necessary to spray the whole field."

The places to check for grasshoppers when they first hatch is along roadsides and ditches and in pastures and headlands. The eggs will hatch first in areas facing south because these are the first to warm up. "It is a good idea to check these on your hands and knees," says Mr. Dolinski. Because of this year's uniform egg hatching, he recommends spraying an infested area 10 to 15 days after the first few grasshoppers have appeared.

The following table, compiled by Agriculture Canada, can be used as a guide when deciding whether or not spraying is necessary.

Number of Grasshoppers per Square Yard

Rating	Roadside	Field	
Normal	0-6	0-3	- Spraying usually not necessary.
Light	7-12	4-6	- Spraying usually not necessary.
Moderate	13-24	7-12	- Spraying may be required to protect crops.
Severe	25-48	13-24	- Spraying should be carried out to protect crops.
Very Severe	over 49	over 25	- Spraying should be carried out to protect crops.

Carbaryl (Sevin), carbofuran (Furadan), dimethoate and malathion are registered for use on both cereals and forages. Azinphos-methyl (Guthion) is registered for use on cereals and certain forages. Carbofuran is registered for use on oilseeds, while malathion can be used only on flax and mustard. Diazinon can be used on rangeland, pasture and non-crop areas. Dimethoate is supplied at $8 per gallon through municipal offices as part of Alberta Agriculture's

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Grasshopper Warning (cont'd)

grasshopper control program. Because some stocks of dimethoate have been stored for several years, they contain a certain amount of sediment which should be strained out so that it does not block the sprayer. Do not try to mix the sediment into the solution.

If spraying is essential on a bee pasture, only malathion should be used and spraying should not be done when the forage is in bloom. Also, spraying should be done only when the bees are absent (early morning or late evening), and the beekeeper should be notified before spraying is started.

A publication entitled "Control of Grasshoppers in Alberta", available from district agriculturists, gives more detailed information on pesticide application rates and on the timing of applications. Information on dimethoate supplies can be obtained from agricultural fieldmen and district agriculturists.

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FOR IMMEDIATE RELEASE

BLACKLEG IS STILL A MENACE

Twenty cases of blackleg were diagnosed in cattle submitted to Alberta Agriculture's veterinary laboratory in Edmonton during a seven week period earlier this spring. Many of the animals had been vaccinated before four months old, but had not been given the necessary "booster" shot.

Dr. Frank Baker, beef extension veterinarian with Alberta Agriculture, points out that blackleg, once the scourge of Western cattlemen, can be effectively controlled by vaccination, and that the vaccine is probably the cheapest and most effective vaccine available to livestock producers. "In view of this fact", says Dr. Baker, "it is surprising that laboratories across Alberta continue to diagnose blackleg in many of the cases submitted to them."

He stresses the importance of giving a scond injection to calves when they are over four months of age. With beef cattle, this means vaccinating the calves at branding time in the spring and again at weaning time.

Blackleg, so called because the parts of the affected muscle turn black and gangrenous, is caused by bacteria which are present in most Alberta soils. The course of the disease, which is invariably fatal, is so rapid that sick animals are rarely seen.

"Blackleg is not, as many people believe, confined to the pasture season," says Dr. Baker. "It can occur throughout the year and under a wide variety of management conditions."

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CHECK HERBICIDE ADDITIVES BEFORE BUYING

Every year about this time farmers are approached by travelling salesmen selling herbicide additives.

An additive is any material which when added to a herbicide or a mixture of herbicides is claimed to increase the product's effectiveness.

Arnold Stearmen of Alberta Agriculture's weed control branch advises anyone contemplating buying an additive about which he has no information to first check with his district agriculturist. All district agriculturists have a list of additives that have been accepted by the federal government for full registration and of those which have received temporary registration, pending the submission of additional scientifically proved data.

So far this year 17 additives have been fully registered for use with herbicides. This means that they possess the attributes that are claimed for them by the manufacturer. Among them are products to enhance the use of paraquat and diquat as contact herbicides. Another 19 products have a temporary registration status which means that they may or may not possess the attributes claimed for them. Among these temporarily registered products are six which are said to reduce spray drift when mixed with such herbicides as 2,4-D; 2,4,5-T; 2,4-DP, dicamba, picloram and mixtures of these products.

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FLY CONTROL IN HOG BARNS

Sanitation is the most important factor in keeping housefly populations down in hog barns. In fact, most populations can be kept to a non-nuisance level in barns which are designed and equipped to eliminate potential breeding areas and to make frequent cleaning easy.

A barn that incorporates a scoop or flush manure removal system will go a long way towards discouraging housefly breeding. Because housefly larvae thrive in fresh, semi-solid manure, it is important that the manure be scooped or flushed at least once every two weeks into a holding tank where it is quickly converted into a liquid.

In barns that have not been designed for such systems, the next best method of control is chemical. Chemical control should be aimed at the adult flies and the larvae as well as at breeding sites in the vicinity of the hog barn. The types of insecticides available include residual wall sprays, impregnated strips and baits.

A residual spray should be applied at low pressure to areas where the flies congregate. These include walls, windows, ceilings, partitions, etc. Residual spray products recommended for use in a hog barn include Basudin, Vapona, Cygon, Malathion, Methoxychlor, Pyrethrins, Ravap, Korlan and Dylox.

Fly strips kill by contact or by releasing a fumigant. They are suitable for barns with only a small fly population and should be hung from the ceiling so that they do not come in contact with people or animals. Recommended products include Vapona and Snip Fly Bands.

Fly baits should be used in combination with a residual spray and be placed where flies collect. Recommended fly baits include diazinon (1% dry bait can be made according to label directions), Vapona, Malathion and Korlan.

Since each insecticide has special precautions that must be taken, it is extremely important to read label directions carefully before using any of them.

Hugh Philip, entomologist with Alberta Agriculture's plant industry laboratory, who has been doing research on housefly control, says one insecticide should not be used contin-

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Fly Control in Hog Barns (cont'd)

uously throughout the fly season because the flies may become resistant to it.

He reports that there are a number of promising new insecticides currently being tested. Among them are the quick-acting synthetic pyrethroid's for controlling adult flies and such insect growth regulators as Th 6040 (Dimilin).

Mr. Philip also says that interest is developing in the use of electric flying insect traps as a means of keeping fly populations down after an acceptable population level has been achieved. He explains that the traps consist of one or two ultra-violet lights surrounded by two screens which are energized by a transformer. Attracted by the ultra-violet light, the flies are electrocuted when they pass through the screens.

Still another form of fly control being investigated involves the use of bacterial and fungal pathogens. "Hopefully," says Mr. Philip,"this biological control method will one day reduce our dependence upon chemical control methods."

An Agri-Fax publication,"Control of Houseflies in Alberta" can be obtained from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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FOR IMMEDIATE RELEASE

SALT TOLERANT CROPS RECOMMENDED

Alberta farmers will be wise to consider growing salt tolerant crops this year if present moisture conditions do not improve in the very near future, says Larry Gareau, forage crops specialist with Alberta Agriculture.

He explains that both soil salinity and alkalinity become more severe under drought conditions. He recommends seeding such areas to a forage mixture because the different species in the mixture will vary widely in the amount of salt they can tolerate, as does the salt content in different parts of a saline area. The species in the mixture which can adapt best to a specific soil condition will be those that become established.

Dr. T. Lawrence of the federal research station at Swift Current, Saskatchewan, says Orbit tall wheatgrass, Revenue slender wheatgrass and Yukon or Polara sweet clover are the most salt tolerant crops available today. They will provide pasture or hay, control wild barley and help prevent saline areas expanding by providing a permanent cover.

Dr. Lawrence recommends the following forage mixture for saline soils that are not subject to more than 10 to 14 days flooding: 3 pounds of Sawki or Mayak Russian wild ryegrass, 2 pounds of Summit or Nordan crested wheatgrass, 8 pounds of Orbit tall wheatgrass, one pound of sweet clover and 2 pounds of Rambler or Roamer alfalfa per acre. Saline areas subject to two to five weeks of spring flooding should be seeded to 3 pounds of Frontier or Castor reed canarygrass, 4 pounds of Carlton bromegrass, 8 pounds of Orbit tall wheatgrass, 3 pounds of Revenue slender wheatgrass, one pound of sweet clover and one pound of Rambler alfalfa per acre.

Dr. Lawrence says forage crops grown in saline soils should be seeded in rows of six to 12 inches apart and no deeper than one inch. Although the seedlings may not emerge for a considerable length of time in a dry year, seeding should be done as soon as possible in the spring so that the seed can take advantage of favorable growing conditions if they occur.

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FOR IMMEDIATE RELEASE

A GUIDE TO 1977 CROP PRODUCTION

If you are planning to reduce your crop acreage this year, because of dry soil conditions, your choice of crops will be very important.

To help you make the most advantageous selection, Lloyd Andruchow of Alberta Agriculture's production economics branch has prepared partial budgets which show expected production costs and returns for wheat, rapeseed, barley and oats grown on summerfallow and for wheat, barley and oats grown on stubble.

"These budgets," says Mr. Andruchow, "take into account only those production costs which vary from one crop to another. Fixed costs such as land interest and tax, operator's labor, overhead costs (insurance and utilities etc.), building and shop tool depreciation and interest charges are not included because they are more or less the same regardless of the crop planted.

A column is provided in these partial budgets for a farmer to substitute his own figures based on his specific soil and climatic conditions, cultural practices, agricultural materials and expected returns.

Following is an example of the partial budget for wheat grown on summerfallow land.

Wheat on Summerfallow $/Acre

Cultural Costs	Material Costs		Fuel & Repair Costs	Your Farm
Vibra Shank - Cultivator-30', 125 h.p. Tractor			$1.48	_____
Rock Picker - 6', 80 h.p. Tractor			$0.16	_____
Drill - 16', 80 h.p. Tractor			$1.07	_____
Seed - 1.5 bu. @ $4.50/bu.	$6.75			_____
Fertilizer - 11-48,45 lbs. @ $200/ton	$4.50			_____
Harrow - 40', 80 h.p. Tractor			$0.16	_____
Sprayer - 58', 80 h.p. Tractor			$0.20	_____
Herbicide (Estaprop) - 9 oz. @ 20.5¢/oz.	$1.85			_____
Total Cultural Costs/Acre	$13.10	$16.17	$3.07	_____

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A Guide to 1977 Crop Production (cont'd)

Wheat on Summerfallow $/Acre (cont'd)

Harvesting Costs	Fuel & Repair Costs	Your Farm
Self-propelled Swather - 16'	$0.62	
Combine - 40" cylinder	$2.48	
Truck - 3 ton	$0.97	
Truck - 1/2 ton	$1.08	
Augers	$0.01	
Total Harvest Costs/Acre	$5.16	
Interest on Operating Capital at 11% for 1/2 Year	$1.18	
Total Selected Cash Costs	$22.51	
Expected Return 35 bu. at $3/bu.	$105.00	
Return over Selected Cash Costs/Acre	$82.49	

This and the other six budgets are based on information provided by farmers in the Viking area of Alberta and the No. 2 Canada Land Inventory soil classification.

Farmers using these budgets may find it useful to refer to the "Farm Machinery Costs", a report published by the production economics branch for estimating operating costs for various farm implements.

"Farm Machinery Costs" and copies of the partial budgets can be obtained from regional farm economists, district agriculturists and the production economics branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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FOR IMMEDIATE RELEASE

FOOD SCIENCE PROGRAM GRADUATES

The Food Science Program is becoming an increasingly popular course at the University of Alberta as the demand for highly qualified personnel in this rapidly expanding industry continues to grow.

This year there will be eight graduates of the program, which is sponsored by the Canadian Institute of Food Science and Technology, the federal Department of Industry, Trade and Commerce and food processing firms and their suppliers.

The graduates are Brenda Brindle, who won the Department of Industry Trade and Commerce Scholarship in 1975 and 1976; Victor Chan; Florence Chiu; Juliana Lo; Duk-Geun Rhee; Steve Tong; David Wong Wan-Keung and Christopher Yip.

The University of Alberta is one of two main sources from which qualified food industry personnel may be obtained in this province. The other is the Northern Alberta Institute of Technology.

A four-year interdisciplinary program, leading to a B.Sc. (food science) was initiated at the University of Alberta in 1966. Based on a curriculum suggested by the Institute of Food Technology (U.S.A.) and the Canadian Institute of Food Science and Technology, it gives students an excellent grounding in the basic sciences as well as a broad training in food chemistry, food microbiology, food engineering and food processing. Specialization in any one of these four areas is also possible.

Graduates of the B.Sc. (food science) program are eligible to become inspectors in government departments (dairy, food and drug, etc.) and in food processing plants. They are also eligible for supervisory positions in large industrial plants and in government laboratories. Others take jobs which involve product development.

To date 187 scholarships have been awarded to food science students from across Canada under an award program, established eight years ago by the Canadian Institute of Food Science and Technology, the federal Department of Industry, Trade and Commerce and food

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Food Science Program Graduates (cont'd)

processing firms and their suppliers. The scholarships were initiated to encourage students to go into the food science program.

A copy of the complete list of 1977 food science graduates from the University's of Alberta, British Columbia, Guelph, Lavate and Manitoba is available from the Food Science Department, University of Alberta, Edmonton, T6G 2N2.

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FOR IMMEDIATE RELEASE

PROGRESSIVE FARMING DAYS - 1977

"Machinery in Action" is the theme of this year's Progressive Farming Days, scheduled to take place at Olds College, Olds, on June 28, 29 and 30.

At this year's show emphasis will be placed on the use of farm equipment in today's rapidly expanding agricultural industry. Those who attend will be able to test the farm equipment that is on display and at work in the field.

In addition to farm machinery, there will be a good cross-section of agricultural chemicals,and experts will be on hand to outline and discuss application methods.

There will be something for every member of the family in the farm and home display section. The large variety of subjects covered will range all the way from farm safety tips to cooking hints.

This year Progressive Farming Days will host the Central Alberta Plowing Match Championship and a local tractor pull event, both of which are guaranteed to add excitement and fun.

A Bar-B-Que and dance are scheduled for June 29 to which everybody is welcome, and there will be facilities for overnight parking.

Plan now to take your family to Progressive Farming Days - 1977 at Olds College on June 28, 29 and 30.

Further information may be obtained from Bruce Martin, Olds College, Olds, Alberta (Telephone 226-8296).

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FOR IMMEDIATE RELEASE

NEW PUBLICATION FOR THE HOME GARDENER

A new publication entitled "Weed Control for the Home Grounds" contains illustrations of most weeds commonly found in Alberta gardens, and outlines recommended cultural and chemical control measures.

Among the weed problems covered in the publication are dandelions, white clover, mosses, quack grass and mushrooms. Other sections deal with weed control in new and established lawns, woody ornamentals and shelterbelts, ponds, driveways and patios and along fencelines. Still another section tells the best way to remove unwanted trees and shrubs from a garden.

"Weed Control for the Home Grounds" is available from district agriculturists and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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DISTRICT HOME ECONOMIST APPOINTMENT

Vera MacDonald, head of Alberta Agriculture's home economics branch, has announced the appointment of Virginia Nell to the position of home economist at Falher. Prior to this appointment, Miss Nell was in training in the Peace River economics office and held regular office days at Falher.

She grew up on a grain farm in Saskatchewan where she was a member of 4-H clubs for seven years and an alumni member for two years. She obtained her B.S. (home economics) from the University of Saskatchewan with a double major in general clothing and textiles. She was head convenor of the home economic's student's 1976 Home Economics Show.

During the summers of 1973-75 she did general ground maintenance work at Wascana Park in Regina, Saskatchewan. She also helped on the family farm.

Miss Nell's hobbies are skating, swimming, softball, music and sewing.

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IRRIGATION GRANTS

Alberta's agriculture minister, Marvin Moore, has announced the award of grants totalling approximately $1.5 million to four irrigation districts in southern Alberta.

Provided from the Alberta Heritage Savings and Trust Fund, these grants are for developing and expanding irrigation in southern Alberta and are part of the $200 million allocation announced during 1975. Priority given to these grants is for the upgrading of current irrigation works and for the expansion of irrigation within existing district boundaries as well as in new areas.

"These funds are only available," said the minister, "because of the foresight of this government in creating the Alberta Heritage Savings and Trust Fund." The fund, comprised of savings from current sales of depleting natural resources, is intended to provide money for long-term investments in the development of the province so that future generations will also be able to benefit from current resource sales. Irrigation, being a renewable resource, is a prime candidate for investment of long-term funds.

Irrigations districts receiving these grants are the eastern irrigation district, $458,000, the Lethbridge northern irrigation district, $287,000, the St. Mary River irrigation district, $590,000 and the Taber irrigation district, $151,000.

Mr. Moore indicated that a much greater interest is developing in irrigation, particularly in view of the current drought situation, and a significantly large number of individuals are enquiring about the viability of irrigation farming. Farmers who wish to pursue irrigation projects are urged to contact irrigation district offices or Alberta Agriculture's irrigation division in Lethbridge. Further funds will be provided to other irrigation districts in the near future.

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CATTLE OUTLOOK

Although there could be some downward pressure on prices late in the second quarter or in the third quarter of this year, prices of all classes of cattle should be on an upward swing. Unless weather conditions deteriorate drastically this summer, or Canada's imports are excessive, the pressure on prices is not expected to be severe.

"Slaughter steer price expectations (basis Calgary) for the second quarter are $40 to $45 per hundredweight with the average being closer to the high end of the scale," says Maurice Kraut, market analyst with Alberta Agriculture. He forecasts the heifer-steer price differential to narrow, with heifer prices coming within $2 per hundredweight of steer prices, and cow prices to average in the low $30 level.

Assuming average grain yields in the coming crop year, feeder prices are predicted to follow the upswing in finished cattle prices. However, Mr. Kraut believes that over-optimism in terms of feeder prices is still unwarranted because current and near future barley prices do not indicate positive feeding margins for finishing cattle. Until these become evident, no price premium for feeder cattle over finished cattle can be anticipated.

"With 'normal' weather conditions and average crop prospects, third and fourth quarter prices for all classes of cattle should be higher than they were in 1976," Mr. Kraut says. For example, third quarter prices for fat steers (basis Calgary) should be in the high $30 to low $40 range with fourth quarter prices even higher.

However, according to Mr. Kraut, there are some uncertainties that could considerably change prices in the short term for all classes of cattle. These are the amount of moisture in Western Canada and the U.S., the rigidity of Canada's global quota on imported beef; the effect of increased hog production on beef consumption in both Canada and the U.S.; the continued high level of poultry production in Canada and the U.S. and the volume of beef exported to the U.S.

The Canadian cattle inventory levels on January 1 of this year were down 4 per cent from 1976 as was Alberta's cattle inventory. Beef cow numbers declined by 5 per cent in both Canada and Alberta.

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Cattle Outlook (cont'd)

With the increased rate of slaughter for the first quarter of this year, a large volume of the heavier feeder cattle (700-800 pounds) from the 1975 calf crop have gone through the feedlots. From now on, last year's calf crop, which was down 4 per cent from 1975, is the main source of feeders. Another reduction in the calf crop can be expected as a result of this year's smaller cow herds.

"The U.S. price and volume expectations are similar to those projected for Canada," Mr. Kraut says. The United States Department of Agriculture's Economic Research Service indicated fat steer prices (basis Omaha) in the second quarter of this year will range from the high $30 level to the low $40 per hundredweight level. According to Mr. Kraut, an Omaha price in the high $30 range could mean a Calgary steer price in the low to mid $40 range. An Omaha price between $40 and $44 could mean a Calgary price in the high $40 to low $50 range, based on tariff and transportation rates, plus the relative dollar values.

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HOG OUTLOOK

Alberta hog prices are expected to be in the mid to high $40-range during the second quarter of this year and only a little higher in the third quarter.

This is the opinion of Maurice Kraut, marketing analyst with Alberta Agriculture. He says the size of the forecast price decline in the second quarter will be influenced by the duration and extent of the current dry weather in Canada and the U.S. and its effect on the total meat supply. It will also be influenced by the duration of the high level of broiler production.

Interpretation of the January Canadian Hog Survey, published by Statistics Canada, indicates second quarter marketings, as reflected by hogs under three months of age, should be up 5 per cent over 1976. Eastern Canadian marketings are expected to be up 7 per cent; Western Canadian marketings should be up 2 per cent and Alberta marketings are forecast to be up 3 per cent.

Mr. Kraut says U.S. reports indicate that the severe winter in that country caused problems with finishing hogs and resulted in some reduction in litter size. These factors, combined with the low corn/hog ratio, are responsible for a smaller increase in U.S. hog production than had been anticipated. According to the March U.S. Hog Survey, production will probably peak in the second quarter or early in the third quarter of this year. Production in the first half of the year is expected to show an increase of between 13 and 15 per cent over the first half of 1976, and production levels in the second half of 1977 should be up 4 to 5 per cent over that of 1976.

The March survey also indicates that farrowings for the December 1976 to February 1977 period were up 12 per cent over the 1976 figure. The March to May farrowing intentions were up 3 per cent from last year.

Preliminary trade statistics from Agriculture Canada indicate to the end of March 1977 Canadian pork imports totalled 51.1 million pounds compared to 35.2 million pounds in 1976. Canadian pork exports increased by 32 per cent to 25.9 million pounds from 19.7 million pounds.

Alberta pork trade with the U.S., based on preliminary statistics from Agriculture Canada, indicate an increase in imports. To the end of March approximately 7.4 million pounds of pork were imported from the U.S. compared with about 5.3 million pounds in 1976. Alberta pork exports decreased from 2 million pounds to 1.5 million pounds.

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WARBLE STILL A PROBLEM IN ALBERTA

A survey carried out by all the major packing plants in Alberta shows that 31,000 of the cattle they bought from the beginning of February to the end of March this year were infested with warble grubs.

Ross Gould, in charge of Alberta Agriculture's warble fly control program, points out that the wholesale meat buyers usually discount grubby carcasses by 5¢ a dressed pound because most of the trim comes off the backs of the animals where the best meat is located. At $30 per carcass, the loss to the Alberta beef industry during the first half of the warble season was in the vicinity of $930,000. Hence, by the end of the present season, it could be approaching $2 million, excluding those losses sustained by farmers and ranchers from poor performance and reduced gains.

Because grubby cattle often cannot be identified until after slaughter, packers have to discount all slaughter cattle to cover their losses. The estimated $930,000 loss sustained in February and March represents a discount of about $5 for every animal sold during that period. Unfortunately, this situation usually means that cattlemen selling clean cattle receive less for their animals than they are worth.

Mr. Gould is convinced that such losses could be virtually eliminated if every farmer in Alberta would treat all his cattle, except his milking dairy cows, with a systemic insecticide every fall for the next three or four years. He cites the Northern Ireland warble situation as an example of what can be accomplished by a concerted, all-out effort over a number of years. Here a survey carried out in 1975 showed that only 0.07 per cent of the cattle on farms had warbles. According to Mr. Gould, farmers in that country did such a good job of treating prior to 1975 that they no longer have to treat all their animals in the fall. If a farmer finds warbles on any of his cattle in the spring, he reports the fact to his county officials who arrange to treat the animals before the warbles have a chance to develop into egg laying flies. The only time a herd or all the cattle in a specific area are treated in the fall is when the animals are found to have a serious infestation.

Mr. Gould says Alberta cattlemen made encouraging progress in reducing the warble fly population in this province during the first few years after the warble fly control program was

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Warble Still A Problem In Alberta (cont'd)

initiated in 1968. In fact, by the spring of 1975, the number of infested animals going to packing plants had dropped to less than a quarter of what it had been in 1968. However, when cattlemen were faced with drastically low prices in 1975 and 1976, they apparently decided that it was not worthwhile to treat cattle which appeared to be almost free of warbles.

"It was this decision," says Mr. Gould, "that was responsible for the return of our warble problem in the springs of 1976 and 1977. Last year's packing plant survey showed that from 25 to 30 per cent of cattle sold for slaughter were infested with warble grubs."

Mr. Gould believes that if all Alberta farmers and ranchers would faithfully follow a program similar to that carried out in Northern Ireland, their cattle would soon be worth millions of dollars more in the market place, and only a few animals would have to be treated each year.

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Telephone Number Changed

The telephone number of the Plant Industry Laboratory in the O.S. Longman Building has been changed to 436-9060. This new number replaces 435-9865 or 66,67 and 68.

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FOR IMMEDIATE RELEASE

FLEABEETLE PROBLEMS PREDICTED

Fleabeetles could cause serious losses in Alberta rapeseed crops this year unless growers check them regularly.

Michael Dolinski, entomologist and pest control specialist with Alberta Agriculture, says that the risk of damage is greatest in those areas where beetles were a problem last year, but that all rape crops should be checked. He recommends checking every day until the rape reaches a height of six to eight inches.

Fleabeetles are tiny, shiny, black insects which jump vigorously when disturbed. Because they overwinter as adults, they are ready to devour rape seedlings as soon as they emerge. The beetles start by eating small holes in the leaves, and, if uncontrolled, will gradually enlarge these holes until the plant is completely denuded of its foliage. According to Mr. Dolinski, treatment costs very little compared with the possibility of greatly reduced yields or even losing the entire crop.

He urges rape growers in those areas of the province where fleabeetles were a problem last year to treat their seed this spring. He recommends Gammasan, Lindasan or Thuralin which can be either mixed with the seed prior to seeding or used as a drill box treatment. Furadan 5G supplies have been depleted for this season.

Mr. Dolinski stresses that even when rapeseed has been treated, the crop should be checked every day. The reason for this precaution is that there is a possibility that the seed treatment will not provide adequate protection if the weather is abnormally dry. In such cases, the crop will have to be sprayed with a foliage spray. The products recommended are Guthion, Furadan and Malathion. Any of these will do a good job, but because they have a very short residual life, it may be necessary to spray the crop several times during the growing season to protect it from invading insects.

Mr. Dolinski reports that fleabeetles are expected to cause the worst problems in the north-eastern and east-central parts of the province and in the area east of Calgary. This prediction is based on the fact that populations have been gradually building up in these areas for several years.

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Alberta
AGRICULTURE

Phone (403) 427-2127

May 9, 1977

FOR IMMEDIATE RELEASE

ELECTRICAL IRRIGATION INSTALLATIONS MUST BE INSPECTED

If you have a new electrical irrigation installation, you should contact your nearest irrigation division office before using it and ask to have an inspection arranged. The inspection is carried out by the Alberta Electrical Protection Branch and is mandatory for all new installations regardless of whether they use utility company power or power generated on the farm.

Len Ring, irrigation systems engineer with Alberta Agriculture, says if he were an irrigation farmer, he would want to have a new installation checked for safety before using it even if the inspection was not required by law. He notes that many systems are potentially dangerous in some areas of the U.S. where regulations are not as strict as they are in Alberta.

A study carried out in western Nebraska on 345 electric drive irrigation pivots, for example, revealed that 129 (37 per cent) did not have a grounding conductor to the pivot; 181 (52 per cent) did not have a fuse or other means of cutting off the power and 133 (39 per cent) did not have a ground rod. "After this study," says Mr. Ring, "the state electrical board inspected another 77 sites and classified 10 (13 per cent) as lethal, 38 (49 per cent) as definitely hazardous and the remaining 29 (38 per cent) as potentially hazardous." Not one of the systems conformed to the United States National Electric Code.

The main use of electricity in irrigation systems is to supply power to the electric motors that run the pumps and to the electric motors located on each tower of a centre pivot sprinkler system. In the latter case the power is often located a long distance away from where it is actually used.

Mr. Ring stresses that ground rods at the pivot point and at the generator must be connected with each other and connected with the ground at the source of power to meet the requirements of the electrical protection code and to be safe. In other words, it is not enough to simply install them; they must be connected. Mr. Ring cites a case in the U.S. last year where two ground rods were not connected and the irrigation operator was electrocuted. "Had they been connected, the fuse would have blown and the man would have been alive today," says Mr. Ring.

- (cont'd) -

Electrical Irrigation Installations Must Be Inspected (cont'd)

Mr. Ring advises anyone who for some reason does not know whether his irrigation system was inspected when installed to check with the person who did the installing. If he was a licensed electrician, he probably arranged to have the inspection done. If the installation was not inspected, the owner should contact his nearest irrigation division office or the irrigation division office, Alberta Agriculture, Agriculture Center, Lethbridge, T1J 4C7.

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May 9, 1977

FOR IMMEDIATE RELEASE

TWO SPECIALTY CROPS WITH A FUTURE

Sunflowers and safflower are two specialty crops which appear to have a great potential in the Prairie provinces.

This opinion was expressed by Dave Durksen, agronomist with Continental Grain Company, Winnipeg, during a recent interview with an Alberta Agriculture official. Mr. Durksen said the popularity of sunflowers as a crop will increase greatly over the next couple of years as we get better hybrids. He also foresees promotion of this crop in the near future, particularly in southern Saskatchewan and southern Alberta, because of its high quality oil which usually commands a premium.

Safflower has been grown in southern Saskatchewan and southern Alberta for a number of years with results varying from excellent to disastrous. The latter situation was caused by a disease known as alternaria. "Since we now have alternaria resistant varieties," said Mr. Durksen, " I feel we will see a tremendous increase in the next two or three years in the acreage devoted to this crop." He reports that the 10,000 acres or so contracted by his company in Montana, U.S.A., last year could jump to almost 100,000 acres this year. Many Saskatchewan farmers are apparently getting back into safflower production,and there could also be some growers in southern Alberta this year.

According to Mr. Durksen, a great advantage of safflower is that the crop fits well into a cereal grain and summerfallow rotation, and it helps control grassy weeds because treflan can be used with safflower.

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May 9, 1977

FOR IMMEDIATE RELEASE

1977 FEEDERS' DAY

The University of Alberta's annual Feeders' Day, designed to give farmers and others interested or connected with agriculture an opportunity to evaluate the latest scientific findings, will be held at the Ponoka Recreation Centre, Ponoka, on June 7.

Following is a brief summary of topics that will be covered this year:

- The effect on performance and profits of weaning pigs at three weeks rather than five weeks of age, and the effects of slaughter weight and feed restriction on carcass quality of finishing pigs.
- Rations, feeding and management techniques for various classes of dairy cattle.
- The effect of cold weather on farm livestock. This report summarizes a decade of research done by the University of Alberta's Environmental Laboratory. It is designed to help livestock producers understand the influence of winter on their animals and suggests ways of reducing the detrimental effects.
- The value of using straw in beef cow winter rations and its limitations with reference to the animal's health, subsequent reproduction and lifetime productivity.
- A study on the relationship between the market weight and profitability of slaughter cattle.

Further information on Feeders' Day 1977 can be obtained from Dr. L.P. Milligan, Department of Animal Science, University of Alberta, Edmonton, T6G 2E3 or from D.B. Karren, Regional Livestock Supervisor, Alberta Agriculture, 4747 Ross Street, Red Deer, T4N 1X3.

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May 9, 1977

FOR IMMEDIATE RELEASE

TREATING DUGOUT WATER

You should treat your dugout water for algae every spring, according to Blair Wright, Alberta Agriculture's engineering technologist at Fairview.

He explains that all dugouts contain algae which, if not treated in the early spring, while still invisible, will gradually form a dense growth in the water. When treated at this stage, the dead organic matter falls to the bottom of the dugout where it decomposes and causes the water to turn black and to develop a very unpleasant odor.

Mr. Wright suggests treating dugout water as soon as spring seeding has been completed. The usual method is to spray a copper sulphate (bluestone) solution over the surface of the water. An alternative way is to put the copper sulphate in a cloth sack and then drag the sack back and forth over the water surface until all the chemical has dissolved. The recommended rate of copper sulphate for both methods is one pound for every 100,000 gallons of water.

Cutrine is recommended for algae control in dugouts containing hard water (over 200 parts per million of hardness) because the copper sulphate will not remain dissolved in the water long enough to do an effective job. Cutrine should be used at rates specified on the label and sprayed over the entire water surface.

Mr. Wright says treatment of dugout water that is "murky" (usually caused by the spring run-off or heavy rains) should be delayed until the silt has settled out because the particles impede the effectiveness of the chemical. If the water does not clear of its own accord, as occasionally happens, it should be treated with aluminum sulphate (commonly called alum) before it is treated for algae. Information on application rates and methods of treatment can be obtained from regional agricultural engineering technologists.

Mr. Wright says that dugouts should also be treated during the first week of July and during the first week of August if they are to be kept reasonably free of algae and if the quality of the water is to be kept palatable.

He also recommends periodically mowing the weeds around dugouts. "Aquatic weeds that cannot be reached with the mower can be controlled with Reglone A," he says. It

- (cont'd) -

Treating Dugout Water (cont'd)

should be sprayed evenly over the surface of the water in June or early July.

Information on controlling cattails and bulrushes around dugouts, and information on maintaining a dugout, can be obtained from your agricultural engineering technologist who can be contacted through your district agriculturist.

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May 9, 1977

FOR IMMEDIATE RELEASE

JAPANESE DAIRYMEN ARRIVE IN ALBERTA

Ten young Japanese men arrived at the Edmonton International Airport recently under the Alberta-Hokkaido Dairy Exchange Program.

They are Yutaka Nakatani, Takahiro Shoji, Fumio Baba, Masashi Kishimoto, Fumio Ito, Jiro Sasaki, Shigeru Someya. Mikio Mori, Toshiaki Sone and Masahiro Tsutsui.

The exchangees were met by representatives of the Dairy Exchange Host Family Association and taken to Olds College where they spent the next few days participating in an orientation program. During this period, they were joined by the seven Alberta exchangees who will be leaving for Japan on July 2.

At the conclusion of the orientation exercises, the Japanese exchangees were introduced to their host families and taken to the dairy farms where they will spend the next year learning about the Alberta dairy industry. The farms are located all the way from Brooks in the south of the province to McLennan in the north.

In addition to exchanging technical information on dairy practices and the dairy industries in the two countries, the exchangees, their host families and members of the communities in which they are located will share experiences and cultural values. In fact, one of the main objectives of the Alberta-Hokkaido Dairy Exchange Program is to provide the maximum opportunity for exchangees to experience the agricultural and cultural situations in each others countries.

Exchangees are chosen on the basis of their knowledge of modern dairy practices in their own country. The 10 young men who have just arrived from Japan have all been brought up on dairy farms on Hokkaido, Japan's most northern island where 75 per cent of that country's dairy farms are located. Most of the exchangees have attended a dairy college in Japan and some are on leave of absence from university.

The new arrivals will bring the total number of exchangees who have come to Alberta under the exchange program since its inception in 1974,to 37. In addition, three professors have spent a year in the faculty of agriculture at the University of Alberta.

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May 9, 1977

FOR IMMEDIATE RELEASE

TREATING VEGETABLE PLANTS FOR MAGGOTS

Did you know that one chemical treatment is not sufficient to control the maggots that attack most garden crops in Alberta?

Alberta Agriculture's entomologist and pest control specialist, Michael Dolinski, says that a large percentage of gardeners only treat their vegetable plants when they seed or transplant them, and are surprised and disappointed when the plants are damaged or killed by maggots later in the season.

The maggots found in most Alberta gardens attack such vegetables as radishes, onions, turnips, cabbages, cauliflowers, broccoli and Brussels sprouts. Unless controlled, they damage the edible roots, make the plants more susceptible to disease and kill many plants outright.

In vegetables like radishes and turnips, the damage may not be evident unless the roots are examined for the presence of white maggots. In the case of transplants like cauliflower and cabbage, the leaves will wilt on plants which have been attacked.

Since garden maggots are so prevalent in this province, Mr. Dolinski suggests most people treat susceptible vegetable plants every year, especially if they have experienced damage in previous years. He recommends treating the soil when seeding or transplanting (in the vicinity of the seed or transplants) with diazinon or ethion granules, both of which are available from most garden supply centres and hardwares. Two to three weeks later a liquid formulation of diazinon must be applied to the base of the plants if protection is to last throughout the summer. In fact, long growing vegetables, like Brussels sprouts and turnips, should be given a third treatment (the same as the second) about a month after the second treatment.

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May 9, 1977

FOR IMMEDIATE RELEASE

AGRICULTURAL SOCIETY GRANT

Marvin E. Moore, minister of Alberta Agriculture, has announced that a grant of $50,000 has been awarded to the Delburne and district agricultural society under the Societies' Capital Grant Program.

The people of Delburne and area have been working very hard, building an arena complex with meeting rooms, dressing rooms and kitchen facilities. When completed, the project will provide a significant benefit and contribution to the Delburne area.

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Alberta

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AGRI-NEWS

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FOR IMMEDIATE RELEASE

SUMMER FARM EMPLOYMENT PROGRAM TO BE CONTINUED

Alberta Agriculture Minister Marvin Moore and Advanced Education and Manpower Minister Dr. A.E. Hohol have announced that the Summer Farm Employment Program will be continued for another summer.

This year's program will operate during July and August and will accomodate approximately 1,000 students. During the past four years the Summer Farm Employment Program has provided over 22,000 farm employment opportunities throughout the province.

All Alberta farmers are eligible to participate in the program, which is designed to provide Alberta youth with farm work experience and farmers with summer help. However, applications will be considered on a first come, first serve basis, and priority will be given to those farmers who did not participate in last year's program. Employment is open to Alberta students who are 16 years of age or older.

Information and application forms for the Summer Farm Program can be obtained from district agriculturists and Canada farm labour pool offices. Applicants will be notified in writing regarding the status of their application.

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May 16, 1977

FOR IMMEDIATE RELEASE

AGRICULTURAL SOCIETY WORK EXPERIENCE PROGRAM ANNOUNCED

Alberta Agriculture Minister Marvin Moore and Advanced Education and Manpower Minister Dr. A.E. Hohol have announced a summer employment program for Alberta youth. Called the "Agricultural Society Work Experience Program", it is part of the 1977 Summer Temporary Employment Program (STEP).

The objective of the Agricultural Society Work Experience Program is to provide students with an opportunity for employment with agricultural societies throughout the province. In general, the participating society will employ students, on a temporary basis, for such projects as "paint-up, clean-up" and the beautification of facilities. The employees will also help the societies prepare for their summer activities which include fairs and exhibitions. Hopefully, in this way the students will gain a significant appreciation of the role of the agricultural society in their communities.

All agricultural societies in the province may apply for an employee under the program. However, participation will be limited to approximately 100 students. Any student who is over 16 years of age and an Alberta resident can apply. He or she should contact the agricultural society in his or her area.

Information on the program and application forms will be distributed to all agricultural societies within the next few weeks.

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FOR IMMEDIATE RELEASE

HIGHWAY WEIGH-SCALES OPENED TO FARMERS

Alberta Transportation Minister, Dr. Hugh Horner, and Alberta Agriculture Minister, Marvin E. Moore, have announced that farmers may now use highway weigh-scales to weigh farm products.

To simplify all transactions, farmers will receive a weight slip every time they use highway weigh-scales, regardless of whether their trucks are loaded or empty. In some cases, two slips may be needed to identify each weight category - the gross vehicle weight and the empty weight. Since each slip will completely identify the vehicle that was weighed, it should always be possible to obtain the net weight of any load.

All scales are operated by the motor transport branch, transport field operations, and inspected by the federal Department of Consumer and Corporate Affairs under the Weights and Measures Act. Because slight differences may exist between any two scales, trade specialists in both provincial departments suggest farmers agree on which scale to use for a transaction, and then use the same scale for all measurements needed to complete the transaction.

Information on weigh-scale operating hours may be obtained from your nearest transport field operations district office or from your local district agriculturist who has a list of nearby weigh-scales.

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May 16, 1977

FOR IMMEDIATE RELEASE

FLEA BEETLE CONTROL PRODUCTS

A considerable amount of spraying is likely to be required this spring to control flea beetles in Alberta's mustard and rapeseed crops.

To help farmers with this job, Michael Dolinski, entomologist and pest control specialist with Alberta Agriculture, has prepared the following table which shows the products that are registered for flea beetle control, the size of container they are available in and the cost per acre of each. All can be used on rape, but only Furadan can be used on mustard crops.

Insecticide	Container Available	Price/Container	Rate/Acre Formulation	Cost/Acre	Acres/Container
Furadan 4.8 F (Carbofuran)	1 U.S. gal	$31.00	2 fl oz	50¢	64
Guthion 50 WP (Azinphos-methyl)	2.5 lb packs	$ 8.85	2 oz	44¢	20
Guthion SC	4 Imp. gal	$68.75	4 fl oz	43¢	160
Malathion 50 EC	1 Imp. gal	$10.00	16 fl oz	$1.00	10

Each of the insecticides listed above has a different wait period. Furadan, which must not be applied to rape more than twice during the season, must not be used on this crop within 60 days of harvest or on mustard within 21 days of harvest. Guthion must not be applied to rape within 30 days of harvest, and Malathion must not be used within 7 days of harvest or when the temperature is below 20° C.

Since Furadan and Guthion are both very toxic, anyone using them must always wear goggles and a respirator when mixing and applying them. As long as these safety precautions are followed, the risk to human health is minimal. It is not necessary to use safety equipment when mixing or applying Malathion, but exposure should be kept to a minimum as is the case when using any pesticide.

Mr. Dolinski stresses that anyone using any type of pesticide has a responsibility to his fellow man and to his environment to use the product in a responsible way. "If users are not prepared to accept this responsibility," he says, "there is a real possibility that pesticides will be so strictly regulated in the future that farmers will have to go through a lot of red tape before they can obtain them."

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FOR IMMEDIATE RELEASE

FOREST TENT CATERPILLAR CONTROL

Alberta Agriculture has received numerous requests for information about web-like clusters that are appearing in deciduous trees and shrubs (those that lose their leaves) throughout a large portion of the province.

Michael Dolinski, entomologist and pest control specialist, says that these web-like clusters contain forest tent caterpillars. If you examine the caterpillars closely, you will see that they are bluish-purple and have a row of creamy-white key-hole-shaped markings down the back of their hairy bodies. When fully grown, they are about an inch and a half long.

As the caterpillars mature, they move out of these clusters and gradually spread over the tree. If present in sufficient numbers, and if left to their own devices they can completely defoliate a tree or shrub. Although they seldom kill it, they can retard its growth.

"The best time to control these insects," says Mr. Dolinski, "is while they are still in the web-like cluster. At this stage it is often possible to remove them by hand." If they have already moved onto a large portion of the tree, you may be able to get rid of them by thoroughly spraying the tree with water under pressure. Failing this, you may want to spray the tree or shrub with an insecticide. Mr. Dolinski says any of the following products will control the caterpillars: Malathion 50, Diazinon 50, Sevin 50 WP, Methoxychlor 25, Dipel, Thuricide, and Dutox.

Except when using Malathion, which provides better control when the temperature is above 20° C., the best time to spray is early in the morning or on a cool day because the caterpillars are usually clustered together at these times, and are, therefore, easier to kill than when they are spread over the tree. Be sure the label on the insecticide you choose states that it can be used on the tree variety you intend to spray. If the trees outside your garden are heavily infested with tent caterpillars, you may have to spray more than once to keep your trees free.

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Alberta
AGRICULTURE

May 16, 1977

FOR IMMEDIATE RELEASE

1977 HAIL SUPPRESSION PROGRAM

The Alberta Weather Modification Board's experimental hail suppression program has been so popular that all potential hail clouds in the central part of the province will be seeded this year.

During the first three years of this five-year program, hail clouds in the northern part of central Alberta were seeded on only about half the hail days. They were not seeded on the other days so that these days could be used as a check. In the southern half of the target area all the clouds were seeded on all hail days.

Farmers in the southern part of the area have been so pleased with the cloud seeding results, particularly in 1976, when slightly different techniques were used, that farmers in the northern part of the area have been asking for two years to have their clouds seeded on every hail day.

In 1976 flares were dropped into the top of the base cloud of hail producing clouds, rather than into the cloud turrets of the storms as had been done in previous years. In addition, cloud base flares were burned below the the shelf cloud in the periphery of the updraft. These seeding techniques were so successful that they are being used again this year.

According to the chairman of the Alberta Weather Modification Board, Gordon Sterling, seven aircraft are being used to seed the whole target area, which runs six miles north of Calgary to four miles north of Wetaskiwin.

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Alberta
AGRICULTURE

May 16, 1977

FOR IMMEDIATE RELEASE

COMMITTEE ON INSECT INFESTATION OF WESTERN CANADIAN GRAIN

A committee, to be known as the Committee on Insect Infestation of Western Canadian Grain, was formed recently in Winnipeg to try to alleviate the stored grain beetle problem in Western Canada.

It is made up of representatives from the Canadian Grain Commission, the federal research and plant quarantine branches, the Alberta, Saskatchewan and Manitoba departments of agriculture and the Country Elevator Association.

According to Alberta's representative, Michael Dolinski, the Canadian Grain Commission is seriously concerned about the number of stored grain beetles that are being transported in railway boxcars to both western and eastern grain export terminals. He says, "This problem, which is of only minor concern in most years, has been fairly intensive in the last two or three years, despite the fact that we have not had wet harvesting conditions. Until recently storage of damp grain has been the main cause of beetle infestations."

Two possible reasons for the present situation are the recent mild winters and the increasing size of farm storage facilities. The mild winters, coupled with the larger grain bins, have resulted in the grain in the middle of the bins never becoming cold enough to destroy the beetles.

Because of the prolonged periods between the stored grain beetle infestations that occured in the past, most farmers do not take any special precautions against this problem. In years when the problem surfaces again, the infested grain usually ends up at the local elevator instead of being treated on the farm. The result is a contaminated grain handling system and very upset foreign customers.

As a first step in resolving this situation, the Committee on Insect Infestation of Western Canadian Grain is going to disseminate information to country elevator agents, district agriculturists and other primary producer contacts on the detection, treatment and prevention of insect infestations in farm stored grain. The next step will probably be to try to make farmers more aware of the seriousness of shipping beetle infested grain by documenting the detrimental effect it is having on the whole grain industry.

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May 16, 1977

FOR IMMEDIATE RELEASE

NEW WEED KILLERS REGISTERED

The following herbicides have been registered by the federal government for use on Alberta field crops this year.

Stampede is a post-emergence herbicide that can be used on wheat and barley to control green foxtail (wild millet, pigeon-grass), wild buckwheat, tartary buckwheat, green smartweed, lady's thumb, redroot pigweed, lamb's quarters, stinkweed and shepherd's purse.

Torch is a post-emergence herbicide that may be used alone or tank-mixed with 2,4-D or MCPA on wheat, barley, oats and flax to control "hard to kill" weeds. When used alone it controls wild buckwheat, tartary buckwheat, lady's thumb, green smartweed, cow cockle, Russian thistle, lamb's quarters, stinkweed, wild mustard, redroot pigweed and flixweed. When tank-mixed it will control these weeds plus hempnettle, ball mustard and the top growth of Canada and perennial sow thistles.

Sencor can be used on barley to control hempnettle, chickweed, cornspurry, lamb's quarters, stinkweed, volunteer rape, wild mustard, tartary buckwheat, ball mustard, green smartweed and lady's thumb.

Mataven is a post-emergence herbicide which can be used on all wheat varieties except Selkirk to control wild oats.

Endaven Plus Carbyne is a post-emergence tank-mixed herbicide that can be used on all wheat varieties except Selkirk to control wild oats.

Tordon 202C is a post-emergence herbicide that can be used on barley that has not been underseeded with a legume to control Russian thistle, redroot pigweed, lamb's quarters, stinkweed, cocklebur, dandelion, wild mustard, wild buckwheat, green smartweed, scentless chamomile, and the top growth of Canada and perennial sow thistles.

Treflan Plus Avadese BW is a post plant, pre-emergence incorporated tank-mixed herbicide that can be used on wheat and barley to control green foxtail and wild oats.

Further information on the above herbicides can be obtained from Arnold Stearman, Weed Control Branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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FOR IMMEDIATE RELEASE

HALL OF FAME NOMINATIONS OPEN

Nominations are again welcomed for the Alberta Agricultural Hall of Fame, announces Marvin E. Moore, minister of agriculture.

Albertans who have made important contributions to the development of agriculture in the province or elsewhere in Canada, and who hold Canadian citizenship, are eligible for nomination.

"Recognition in the Agricultural Hall of Fame is the highest honor Alberta Agriculture can bestow on an individual," says Mr. Moore.

Nominations to the Hall of Fame will be accepted until July 1. Nomination forms are available from district extension offices throughout the province and from Alberta Agricultural Hall of Fame, Extension Division, Alberta Agriculture, 9718 - 107 Street, Edmonton, Alberta. T5K 2C8.

Supporting evidence of a nominee's contributions should accompany each entry, and those making nominations are asked to include a brief history of the nominee's life in Alberta.

Selection of men and women to be named to the Hall of Fame is made by a committee representing farmers, agricultural business and research, and government.

Since its foundation in 1951, the Hall of Fame has honored 34 men and women for their notable contributions to farming, ranching and the quality of rural life.

Five Albertans were recognized in 1976: Elizabeth Pedersen, Everett Birdsall, Charles McKinnon, Harold McLaughlin, and William Benson. Portraits and a description of their accomplishments have been added to the permanent Alberta Agricultural Hall of Fame display on the main floor of the Provincial Museum in Edmonton.

Service is the basic qualification for inclusion in the Hall of Fame; a life of dedication to the betterment of agriculture distinguishes each person chosen in past years. Professional or voluntary involvement in farming or rural life will be considered by the selection committee, if the nominee has made an outstanding contribution in his or her specialty.

The committee will give preference to people associated with practical aspects of agriculture, including farmers and ranchers. Agricultural business people, professional agrologists and

- (cont'd) -

Hall of Fame Nominations Open (cont'd)

rural community workers will also be considered.

Men and women selected in 1977 to the Alberta Agricultural Hall of Fame will be honored at a banquet and ceremony during Agriculture Week in the later part of October.

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CORRECTION:

The third paragraph of the article "Warbles Still a Problem in Alberta" (May 9 issue of "Agri-News") should read "since grubby cattle often cannot be identified until after slaughter, a packer who wishes to recover these losses may have to discount all cattle. The estimated $930,000 loss sustained in February and March would represent a discount of about $5 for every animal sold during that period. Unfortunately, this situation may mean that cattlemen selling clean cattle receive less for their animals than they are worth.

May 16, 1977

FOR IMMEDIATE RELEASE

TRANSPLANTING BEDDING PLANTS

Don't get carried away by our early spring, and plant your bedding plants in the garden before the last week in May, advises Pat Flinn of Alberta Agriculture's horticultural branch.

She stresses that even though the spring is about three weeks earlier than usual, we could still get a severe frost before the end of the month. She also points out that all bedding plants should be hardened off before they are transplanted. Hardening off entails gradually reducing the water and temperature. The ideal way to reduce the temperature is to put the flats containing the plants in a cold frame (box-like structure with a glass top) and leave the top off during the day.

If you do not have a cold frame and cannot improvise one with a storm window and some boards, you should put the flats near the foundation on the sheltered side of your house or in a protected part of the garden.

Miss Flinn says it takes about a week to harden plants off, and that if there is a danger of frost during this period, you should cover them with burlap sacking or blankets, even if they are in a cold frame.

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May 16, 1977

FOR IMMEDIATE RELEASE

TESTING DRINKING WATER FOR BACTERIA

If the water from your well has developed an odor or you have noticed any change in its taste, you would be wise to have it checked for bacteria, says Ron Johnston, water and sewage engineer with Alberta Agriculture.

Spring is a good time to do this test because the water table is high compared with later in the season, and if there is a contamination problem, it will usually show up.

There are two main parts to the bacteriological test. First the water is tested for coliforms. Depending upon the test, if more than one coliform or more than 2.2 coliforms per 100 milimeters of water are found, the quality of the water is doubtful. In this case the owner will be asked to repeat the test, and if the coliform count is above these figures again, a health inspector will come out and check the water himself.

In the second part of the test, the water is checked for faecal coliforms. If these are found to be above one or 2.2 per 100 milimeters of water, again depending upon the test, the water is considered to be polluted and unsatisfactory for drinking. In this case, a health inspector will check the well to find out where the contamination is coming from. Seepage from a septic tank and manure storage areas is a common source of pollution.

You can get the necessary sample bottles for testing your water and instructions on how to do it from your local health unit. All bacteriological tests are free.

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May 16, 1977

FOR IMMEDIATE RELEASE

THERMAL BLINDS FOR GREENHOUSES

Greenhouse heating costs can be cut by installing thermal blinds, according to a researcher at the National Institute of Agricultural Engineering, Silso, Bedfordshire, England.

Information received by Alberta Agriculture's horticulture branch states that the blinds, previously considered too expensive to be practical, are now considered a cost-saving measure.

K. Winspear of the National Institute of Agricultural Engineering told a conference on greenhouse engineering that a greenhouse operator who used the blinds calculates his heating costs at one per cent of production compared with up to 40 per cent for a commercial glass-house of the same size.

Tests have apparently shown that thermal screens can reduce heating costs per night in Britain by as much as 55 per cent.

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May 16, 1977

FOR IMMEDIATE RELEASE

ALBERTA PORK CONGRESS EXHIBITS

Twenty-eight swine breeders - one from B.C., three from Saskatchewan and 24 from Alberta - have entered 65 purebred swine and 116 barrows in the 1977 Alberta Pork Congress. These figures compare favorably with last year when 20 breeders entered 51 purebred animals and 65 barrows.

The Yorkshire breed with 20 Yorkshire boars and 17 Yorkshire gilts again dominates the number of entries. Five Landrace boars have been entered, which is more than in the previous two years.

The breeding boars and gilts will be displayed, and a competition for the neatest pen offers some very attractive prizes. These animals will be judged on June 23 - the final day of the show. Sale time is 1:00 p.m. with Don Hutton as auctioneer.

A record of 53 entries have been received in the single barrow carcass class which will be evaluated for carcass quality. Twenty-one groups of three barrows each will be judged on a live basis.

A sale of the top 10 carcasses will be featured after the pork banquet on June 22 at the Red Deer Lodge Hotel.

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May 16, 1977

FOR IMMEDIATE RELEASE

THREE MARKETING DIVISION APPOINTMENTS

Alberta Agriculture's marketing commissioner, Frances Cullen, has announced the appointments of a project manager and two marketing officers.

The project manager is Linda Ewanyk who will supervise a team of seven marketing officers engaged in one or more projects and will participate in the selection and training of new marketing officers. She will also assist the commissioner in her public relations activities and in discharging special requests that originate from the minister or deputy minister of agriculture.

Ms. Ewanyk was born in Edmonton and graduated from the University of Alberta in 1969 with a B.Sc. (chemistry), and in 1972 with an M.Sc. (foods).

From 1969 to 1970 she was a food technologist in the research unit of the Alberta Dairymen's Association. From 1972 to 1977 she was a marketing officer with Alberta Agriculture. During this period she was seconded to West Africa for two years where she worked as a research consultant with the International Development Research Centre.

Bard Haddrell, who will be located in Edmonton, and Bill Luxton, who will be located in Calgary, are the two new marketing officers. Their responsibilities will include enlisting the co-operation of all segments of the production and marketing chain in matters pertaining to quality, pricing, packaging, promotional needs and the nutritional value of Alberta agricultural products. They will also be responsible for maintaining effective communication with all sectors of the food marketing chain and for establishing an effective dialogue with consumers to gain the acceptance of Alberta agricultural produce.

Haddrell

Mr. Haddrell was born and raised in British Columbia. He graduated from the University of Victoria in 1971 with a B.A., having specialized in history and economics. Following graduation he spent two years with the Victoria city police. He then worked for Burns Foods for two years prior to joining Alberta Consumer and Corporate Affairs in 1975. He was a consumer relations officer with consumer and corporate affairs at the time of his present appointment.

- (cont'd) -

Three Marketing Division Appointments (cont'd)

Luxton

Mr. Luxton was born and raised in Calgary. He obtained a B. Comm. (marketing) from the University of Calgary in 1970. From 1970 to 1972 he worked as a marketing services assistant with Labatts Alberta Brewery in Edmonton. He spent the next year as sales representative (Calgary) with the consumer products division of Warner Lambert Canada Ltd. From 1974 until his present appointment, he was marketing services manager with Love Feeds Ltd. in Calgary.

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May 16, 1977

FOR IMMEDIATE RELEASE

RESOURCE ECONOMIST APPOINTED

Charles Pei, head of Alberta Agriculture's resource economics branch, has announced the appointment of Dr. Yilma Teklemariam to the position of resource economist.

As resource economist, Dr. Teklemariam will be responsible for applied economic research related to the natural resources of Alberta Agriculture and will work on pertinent issues that are identified by the department's client agencies. The resource economics branch is aiming at providing interpretative information and find solutions that are unique to agriculture in Alberta.

Dr. Teklemariam was born in Ethiopia where he grew up in a typical farming community. He obtained a B.Sc. (agricultural economics) from the Haile Selassie I University of Ethiopia in 1968. From 1969 to 1971 he attended Colorado State University in the United States and obtained an M.Sc. (natural resource economics). While in the U.S. he worked with the import/export study team of the United States Department of Agriculture's Economic Research Service. He then enrolled at the University of Alberta where he completed his Ph.D. program in the department of rural economy. His Ph.D. work was on the economic analysis of new irrigation development. In 1976 Dr. Teklemariam was appointed a lecturer in the department of rural economy.

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AGRI-NEWS

May 23, 1977

FOR IMMEDIATE RELEASE

LIBRARY
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DEPARTMENT OF AGRICULTURE
EDMONTON, ALBERTA

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Alberta

May 23, 1977

FOR IMMEDIATE RELEASE

FARM WATER PUMPING PROGRAM

Alberta Agriculture Minister, Marvin Moore, has announced details of the Farm Water Pumping Program which will be administered in drought areas of the province.

Alberta Agriculture is in the process of purchasing six portable pumping units, each of which will be accompanied by two miles of light-weight aluminum pipe. All the pumps are designed for use with tractor power take-off assemblies and will be capable of moving water for distances of over two miles. These pumping units will also include transport equipment.

Farmers wishing to use these units will be responsible for providing tractor power for operating the pump, for moving the pump and pipes, for assembling and installing the equipment, and for dismantling and reloading the equipment. All requests received from farmers will be serviced on a priority basis with those in the greatest need being served first. The point of contact for persons wishing to use the pumps will be their local district agriculturist's office.

It is anticipated that the six units will be available as early as June 1. In the meantime,it is hoped that farmers will make use of equipment that is available locally throughout most areas of southern Alberta. Irrigation equipment, for example, can be adapted for filling dugouts. Further information about the program, about water management practices and water supplies is available from district agriculturists and agricultural fieldmen.

Mr. Moore said, "It is anticipated that the use of these pumping units for filling dugouts will provide a much needed source of water to the cattle industry in the southern portion of the province."

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Alberta

May 23, 1977

FOR IMMEDIATE RELEASE

ALBERTA AGRICULTURAL RESEARCH TRUST GRANT

"Agriculture research will take a great step forward in 1977," said Marvin Moore Alberta's minister of agriculture, when announcing a grant of $250,000 to the Alberta Agricultural Research Trust.

Established jointly by industry and Alberta Agriculture in 1966, the trust received over $3.75 million worth of funds to date for research into all aspects of agricultural production.

The board of trustees, representing various aspects of the agricultural community is responsible for operating the trust and for handling on a project basis the applications received for financial assistance. Because of the nature of the trust, private industry will be providing a matching portion to bring the total allocation for 1977 to $500,000. Although the board's priorities are for research which is conducted in Alberta, funds are occasionally directed to other provinces. Some projects are going on at universities throughout Canada and at the Western College of Veterinary Medicine in Saskatchewan.

Examples of the types of research conducted are: various feed analysis programs and effects on animal husbandry; a number of programs in food science relating to improving the quality of food for the Alberta consumer; a significant number of plant breeding programs for grains and oilseeds; various agricultural economics studies; soil science analysis of fertilizers and their applications; and animal disease research.

Mr. Moore indicated that a cheque in the amount of $250,000 has been sent to Dr. J.P. Bowland, secretary of the Alberta Agricultural Research Trust. "These funds," says Mr. Moore, "were recently appropriated by the provincial legislature during budget reviews and approval."

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May 23, 1977

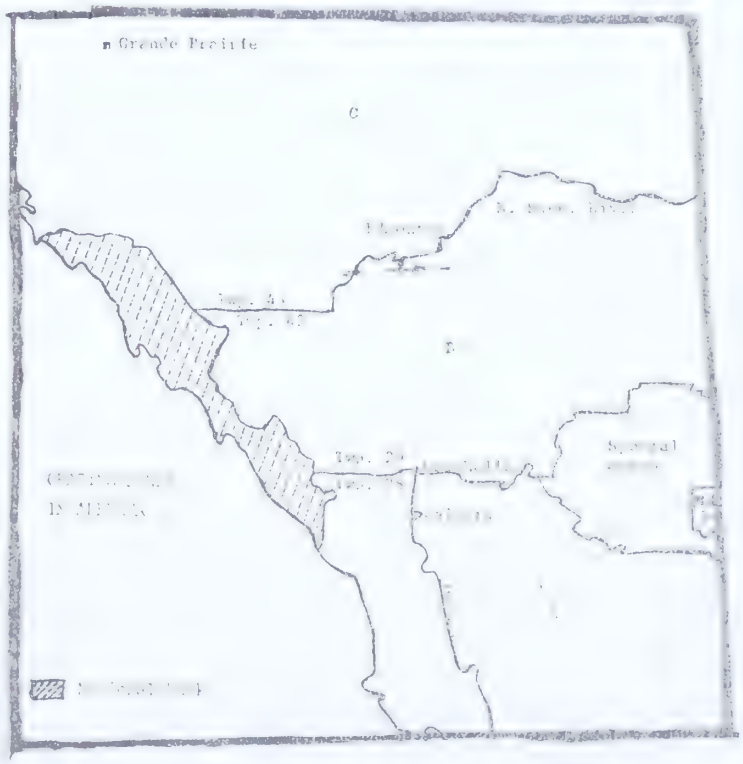
FOR IMMEDIATE RELEASE

GRAZING LEASES

Alberta Agriculture has received a number of enquiries in the past few weeks regarding annual grazing lease fees, the basis of assignment fees and the tax implications of grazing rights.

On public lands grazing leases are normally administered by Alberta Energy and Natural Resources, but leases in the designated special areas of the province are administered by Alberta Municipal Affairs. Both departments determine their annual lease fee on the basis of the forage value and grazing capacity of the land.

Harry Warne of Alberta Agriculture's farm management branch explains that the forage value of grazing land is based on the weighted average price of beef cattle from July to December of the preceding year, excluding A1 and A2 slaughter steers and heifers; the carrying capacity of the land and the average gain of cattle on grass. A percentage of the forage value is then used to determine a rental royalty which is used in the formula for arriving at the grazing fee. This year the percentage of the forage value is 7.5 per cent in the area of the province lying south of a line extending east and west of Drumheller, excluding the special areas (A on grazing zone map); 6.25 per cent for the special areas and the area between the North Saskatchewan River and the line through Drumheller (B) and 3 per cent in the area north of the North Saskatchewan River (C).



Following is the formula used to determine annual grazing fees:

$$\frac{\text{Average Selling Price (26.87 in 1977)} \times \text{Average Gain of Cattle (250 lbs.)}}{\text{Carrying Capacity (Acres per Head per year)}} \times \text{Royalty For Area} = \text{Annual Grazing Fee}$$

- (cont'd) -

Grazing Leases (cont'd)

Alberta Energy and Natural Resources also use a formula to arrive at the assignment fee that they charge an individual when he purchases a lease. It is based on indexed land values and cattle prices using the base period 1973-75. Alberta Municipal Affairs arrives at their assignment fees by individual appraisals.

Alberta Energy and Natural Resources usually lease out grazing land for 10 years and renew the lease without charging another assignment fee. Alberta Municipal Affairs' leases usually run for up to 20 years and are renewable for a fee of $15. When a lease is transferred from one family member to another (including a family held corporation), Alberta Energy and Natural Resources charges a minimum assignment fee of $50 for the transaction, while Alberta Municipal Affairs charges $30.

To be eligible to obtain grazing rights in Alberta, a person must be a Canadian citizen, and he must take the lease for a minimum of three years. As a general rule, rights to leases are sold to another farmer with agricultural land. In such cases, the buyer is normally responsible for paying the assignment fee that is charged when the grazing rights change hands. Mr. Warne advises a person who buys grazing rights to make sure that the price he pays for these rights takes into consideration the assignment fee. Otherwise he could find that after having paid what he felt was a fair price for the grazing rights, he is responsible for an additional outlay to cover the assignment fee. Mr. Warne also advises anybody who buys grazing rights to make sure that there are no grazing fees that are in arrears.

For income tax purposes the purchase of grazing rights are treated as a leasehold interest and included in capital cost allowance Class 13. The annual capital cost allowance is determined by prorating the cost of the lease over the remaining term of the lease. Should the leasee have the first right to renew a lease for one or more periods, the length of the first renewal period must be added to the remaining term of the lease before calculating the "prorated portion" of the cost. For example, if a farmer obtains a lease with 6 years remaining which is renewable for a 10 year period, he would then prorate the cost of the lease over a 16 year period. The income tax regulations allow leasehold interest to be prorated over a minimum of five years and a maximum of 40 years.

Grazing Leases (cont'd)

On the disposal of a grazing right, the taxpayer may incur a terminal loss or recapture of capital cost allowance and capital gains, depending on the amount of the sale price of the "right to the grazing lease".

Anyone who would like further information on grazing leases outside the special areas should contact the Grazing Lease Administration, Land Appraisal and Planning, Alberta Energy and National Resources, 9833 - 109 Street, Edmonton, T5K 2E1. Enquiries about grazing leases in the special areas should be sent to the Special Areas Board, Alberta Municipal Affairs, Hanna, Alberta, T0J 1P0.

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May 23, 1977

FOR IMMEDIATE RELEASE

ALBERTA'S SUGAR BEET INDUSTRY

Sugar beets continue to be a leading cash crop in southern Alberta where they contribute significantly to the overall agricultural economy.

Approximately 800 irrigation farmers grow sugar beets under contract to Canadian Sugar Factories Ltd. The number of acres grown each year is determined by the traditional market requirements of the Prairie provinces. For the past few years in the neighborhood of 40,000 acres have been seeded to sugar beets, representing 6 per cent of the land that was irrigated last year.

There are three main requirements for the production of a high yielding sugar beet crop. These are early seeding to allow for a long growing season, the timely application of water and plenty of sunshine.

Returns to sugar beet growers are determined by a series of percentages applied to the net receipts realized by Canada Sugar Factories from the sugar and its by-products. These percentages are arranged during negotiations between Canada Sugar Factories Ltd. and the Alberta Sugar Beet Growers Association. During the last few years, they have been 63 per cent for sugar, 50 per cent for molasses and 20 per cent for beet pulp. When the world price for sugar averaged 20¢ a pound in 1975, Alberta's sugar beet growers received $36.38 per ton of beets (12.6¢ per pound of sugar). Returns for the record yielding 1976 crop will be lower than for the 1975 crop, because the current world price for sugar is only about 11¢ per pound. Whenever market returns are too low to cover production costs, the federal government sets a floor price to provide some protection for this domestic industry.

In addition to processing sugar at the Picture Butte and Taber Plants, Canadian Sugar Factories Ltd. provides numerous services to the sugar beet growers. One of these is the measuring of fields to ensure that the sugar beet acreage does not exceed that which is contracted. The growers also receive information on seed requirements, fertilizer recommendations and application rates and the use of herbicides and insecticides. Soil sampling is done by sugar factory personnel to keep a close watch on root insects like nematodes. It is expected that by 1980 all beets will be grown on

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Alberta's Sugar Beet Industry (cont'd)

a four-year rotation basis to solve the nematode problem.

According to Lloyd Andruchow of Alberta Agriculture's production economics branch, there are a number of changes taking place in the sugar beet industry in this province. At the factory level, for example, the loading stations have been enlarged and reduced in number and all the beets are now transported by truck rather than by rail from the loading stations to the factories. These changes have been made to improve efficiency and to reduce freight costs. At the producer level, new management practices have been introduced to help solve the labor problem. These include space planting, mechanical thinning and the use of pre-emergence and post-emergence chemicals.

Mr. Andruchow says the provincial government initiated two programs several years ago to upgrade labor housing and to increase the supply of labor. These programs have helped to alleviate the chronic labor problem which has plagued the sugar beet industry over the years.

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May 23, 1977

FOR IMMEDIATE RELEASE

ALBERTA GREEN CERTIFICATE FARM TRAINING PROGRAM

Prospective green certificate program trainees (and farmers who would like to train the trainees) can obtain application forms from district agriculturists and Canada farm labor pool offices.

Supported financially by the federal and provincial governments, and co-ordinated by Alberta Agriculture and Alberta Advanced Education and Manpower, the Alberta green certificate farm training program was established in 1974 to provide young people interested in farming with a new way of learning the manual skills and management techniques needed in modern farming.

The program has three levels of certification. A trainee who qualifies for a green certificate level I will have all the skills necessary to be a good general farm technician in his particular field of specialization. A trainee who qualifies for a green certificate level II will have all the level I skills plus skills in management and in his own specialty. These will qualify him to become a foreman or a herdsman, but do not necessarily indicate that he is capable of financial management. A trainee who qualifies for a green certificate level III has all the skills covered by the previous two levels plus the skills required for owning and operating his own farm.

The green certificate program is designed to enable trainees to learn through on-the-job experience under the guidance of an experienced farmer and through the acquisition of related educational information obtained from special training courses in the district where the trainee is located and from agricultural colleges.

A person who qualifies for a green certificate level III automatically satisfies the knowledge and experience requirements for the beginning farmer loan program, administered by the Agricultural Development Corporation. However, if a loan applicant wants to borrow for a specific type of farm enterprise, he has to show that he has the necessary knowledge and experience in that enterprise before he will be granted a loan.

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Alberta

Alberta Green Certificate Farm Training Program (cont'd)

Unlike most apprenticeship programs, the green certificate program does not have a definite time period in which the trainee must obtain his certificate. For example, someone with a farm background and good farming experience, plus agricultural college or university training, may qualify for a green certificate level III with little or no additional training. On the other hand, a person with no past agricultural education or experience would probably take three years of training to qualify.

Training farms are approved on the basis of the farmer's ability to teach and to relate to people. All prospective trainers are evaluated by a regional green certificate co-ordinator and a representative of the agricultural college in the area. They are not allowed to train close relatives under the program.

Because travel and agricultural experience in a foreign country increases a trainee's potential, program administrators have made arrangements that will allow trainees who are close to receiving their green certificate to take some of their training on an approved training farm in a country with which Canada has a training exchange agreement. However, wage assistance is not available to trainees working on farms in a foreign country.

An applicant for training under the green certificate program must be over 17 years of age and have written parental consent if he or she is under 18. The prospective trainee must also be legally entitled to work in Canada and be sincerely interested in making farming his or her life's work.

Completed application forms for the Alberta green certificate farm training program should be sent to the Director of Farm Training, Alberta Agriculture, 4910 - 52 Street, Camrose, T4V 1V5.

May 23, 1977

FOR IMMEDIATE RELEASE

FIELD SPRAYERS

Is your sprayer adequate for applying today's specialty herbicides? Does it need modifying or do you need a new one to meet the technological requirements of these modern weed killers?

A vast array of specialty herbicides has been developed over the last 20 years because traditional weed killers like 2,4-D cannot cope with all the new weeds that have taken over from those that were a menace 30 years ago. The herbicide 2,4-D, for example, which has successfully brought wild mustard under control, often improved growing conditions for the more "hard-to-kill" weeds when it controlled this and other relatively easy-to-kill weeds. The result was less competition for light, nutrients and water.

The problem with using the modern weed killers is that the older sprayer models are usually completely unsuited to applying them. In most cases these specialized herbicides have to be applied at rates of 10 to 40 gallons of water per acre compared with only four gallons per acre for many of the more traditional herbicides.

The average older type of farm sprayer is incapable of handling such application rates without major modifications. For one thing they require nozzles that are capable of delivering a greater volume of solution evenly over the width of the swath. Such large volumes of water necessitate a high capacity pump with large inlet and outlet hoses to carry the solution from the tank through the pump to the nozzles.

The tank size must also be increased to handle such high volumes of water if the same number of acres are to be covered per load. Since a larger tank means a heavier sprayer, narrower tires must be replaced with wider ones.

Since some of the specialized herbicides are only available in wettable or soluble powders, they must be agitated in the spray tank during the spraying operation. This means the installation of a special agitation system. If the new herbicides are to justify an investment of $3 to $12 per acre, they must always be applied as accurately as possible. It is essential, therefore, that all dirt and other foreign material be removed between the tank and the pump and

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Alberta
AGRICULTURE
COMMUNICATIONS

Field Sprayers (cont'd)

between the pump and the nozzles with efficient screening devices.

In view of today's costs, it only makes sense to use the utmost care to obtain the greatest precision possible when applying these new more expensive chemicals. When properly applied they provide the surest way of increasing production and of obtaining the highest dollar return from the time, money and labor invested in the crop.

Information on upgrading a sprayer and the features to look for when buying a new one are contained in the publication "Field Sprayers". It also contains calibration charts in Imperial and metric measurements and application volume charts for choosing nozzles.

"Field Sprayers" is available from district agriculturists and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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May 23, 1977

FOR IMMEDIATE RELEASE

SHELTERBELT SURVEY RESULTS

Did you know that about half the shelterbelts planted on Alberta farms over the past 10 years did not develop into good windbreaks?

This was one of the findings of three surveys carried out in different regions of the province in the last three years by Alberta Agriculture staff. Lack of proper planning related to the location of the shelterbelt site, inadequate soil preparation and too close plantings were the main causes of the problem. The surveys showed that people are inclined to order too many trees for the space they have, and then to plant them too close together.

Another factor revealed was that only about 50 per cent of the trees planted in th last 15 years have survived, mainly because of poor management. According to the survey data, insects and disease were not implicated in this high mortality rate, except in a small percentage of shelterbelts which had a large proportion of poplars. In these cases stem canker caused an above average mortality rate. Statistics show that a survival rate of between 75 and 100 per cent is common under good management in all areas of the province.

Still another factor brought out by the surveys was that survival rate varies to some extent with the varieties planted. For example, caragana and lilac usually have a much higher survival rate than other varieties. Lodge pole pine, Scotch pine and Siberian larch, on the other hand, have a considerably lower survival rate than average.

Herman Oosterhuis, in charge of Alberta Agriculture's tree planting programs, says most of the above problems can be avoided if people will spend a little time deciding what it is they hope to obtain from their trees in terms of shelter and the beautification of their premises. He says the first thing they should do is to make a detailed plan on paper of their intented planting. Then, when selecting varieties, consider such things as growth rate, longevity and the ultimate size of the shelterbelt trees.

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Shelterbelt Survey Results (cont'd)

Mr. Oosterhuis stresses that anyone planting one or a combination of tree varieties in a shelterbelt should follow the recommended row and in between row spacings if they want their trees to fulfil their potential. Finally, people planting shelterbelts should be prepared to cultivate the shelterbelt area for several years after the trees have been planted and to fence it against livestock.

FOR IMMEDIATE RELEASE

NEW 4-H CENTRE

Alberta's 4-H clubs are busy this summer raising money to buy 143 acres of land on Battle Lake, about 80 miles southwest of Edmonton.

The property will cost $95,000, and a foundation, known as the 4-H Foundation of Alberta, was formed earlier this spring to collect donations from 4-H clubs and others across the province. Since the beginning of this year, the clubs have raised $55,000 by a variety of activities. They included rummage sales, bake sales, bottle drives, antique sales, community suppers, talent shows, slave auction sales where club members are auctioned off for a day to work on a nearby farm and many other unique events. Some members of the 4-H beef clubs have even pledged a percentage of the money they will receive when they sell their animals.

The activities that will be held at the new centre will include provincial and regional 4-H programs. Among these are club weeks, leadership training seminars, the selection of award winners, environmental conservation camps, project development workshops and the annual leadership development conference. It is envisaged that the centre will also be used by industry for personal and job development workshops.

According to the chairman of the 4-H Foundation of Alberta's board of directors, Allan Shenfield, the foundation plans to take possession of the Battle Lake property on September 1 and to hold a province-wide rally on September 4 to celebrate the 60th anniversary of 4-H in Alberta.

Mr. Shenfield is a farmer in the Spruce Grove area who has been involved in 4-H work for many years. In addition to being chairman of the 4-H Foundation of Alberta's board of directors, he is chairman of the Agricultural Development Committee of the Edmonton Exhibition.

Tom Sterling, a native Calgarian, is the vice-chairman of the board and an active member of the Edmonton business community. He is vice-president and general manager of Molson Alberta Brewery Ltd.

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FOR IMMEDIATE RELEASE

CANADIAN RURAL SAFETY CONFERENCE WORKSHOP

Farm organization leaders and people supporting, or directly involved with, farm safety programs are invited to attend the Canadian Rural Safety Conference Workshop to be held at the Olds College, Olds, from June 13 to 15 inclusive.

The program is divided into four sessions. The first, entitled "Monitoring Farm Accidents" will be co-ordinated by Solomon Kyeremanteng of Alberta Labour's occupational health and safety division. It will outline the need for farm accident monitoring and Alberta Agriculture's experience with its recently established monitoring service. There will also be a panel discussion on the problems involved in monitoring farm accidents.

The second session, "Farm Safety Programs", will be co-ordinated by Doug Taylor of Alberta Agriculture's farm training division. It will include a panel discussion on farm safety educational programs and their effectiveness, a workshop on developing a farm safety campaign and a resource fair outlining the resource materials available to the public for promoting farm safety.

The third session, "Safety and Farm Machinery", will be co-ordinated by Murray Green, farm machinery engineer with Alberta Agriculture. It will cover sound and vibrations as they effect farm machinery operators, standards and testing procedures for farm machinery and guards and shields as related to machine designs.

The fourth session will deal with pesticide and fertilizer safety and is being co-ordinated by Michael Dolinski, entomologist and pest control specialist with Alberta Agriculture. It will cover legislation and regulations pertaining to pesticides and fertilizers, general aspects of pesticide safety, insecticide and herbicide hazards and safety and fertilizer use hazards.

The cost of the Canadian Rural Safety Conference Workshop, which is being sponsored by the Western Rural Safety Conference, the Canada Safety Council and the

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Alberta

Canadian Rural Safety Conference Workshop (cont'd)

Alberta Safety Council (host) is $10 plus $15 a day for room and board at the college. Registration forms can be obtained from district agriculturists and the Alberta Safety Council, Room 201, 10526 - Jasper Avenue, Edmonton, T5J 1Z7.

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May 23, 1977

FOR IMMEDIATE RELEASE

DAYS AND HOURS OF OPERATION OF GOVERNMENT WEIGH SCALES

As announced earlier, Alberta farmers may now use highway weigh-scales to weigh their farm produce.

The following list of the days and hours during which the scales are operating in different areas of the province was provided by the field operations section of the Alberta motor transport branch.

Name of Scale	Days Of Operation	Hours Of Operation
ACHESON	Monday through Saturday	6:00 a.m. to 2:00 a.m.
BALZAC	Monday through Friday	7:00 a.m. to 11:00 p.m.
COCHRANE	Monday through Friday	8-hour day (varied, contact Calgary office)
COUTTS	Seven days a week	24-hour day (excluding Friday midnight to 8:00 a.m. Saturday)
DEWINTON	Monday through Saturday	7:00 a.m. to 4:00 p.m.
DUNMORE	Monday through Saturday	6:00 a.m. to 2:00 p.m.
FT. McLEOD	Monday through Friday	8-hour-day (varied, contact Lethbridge office)
GRANDE PRAIRIE	Monday through Friday	8:30 a.m. to 4:30 p.m.
GRIMSHAW	Monday through Saturday	6:00 a.m. to 2:00 a.m.
JUMPING POUND	Monday through Saturday	6:00 a.m. to 2:00 a.m.
LEDUC	Monday through Friday	8:00 a.m. to 12:00 midnight
MORRIN	Monday through Friday	7:00 a.m. to 11:00 p.m.
RED DEER	Varies	(Contact Red Deer office)
REDWATER	Monday through Friday	8:00 a.m. to 12:00 midnight
ST. ALBERT	Monday through Friday	8:00 a.m. to 12:00 midnight
VERMILION	Monday through Saturday	6:00 a.m. to 2:00 a.m.
WHITECOURT	Monday through Friday	7:00 a.m. to 11:00 p.m.
YELLOWHEAD	Monday though Saturday	6:00 a.m. to 2:00 a.m.

May 23, 1977

FOR IMMEDIATE RELEASE

WARBLE GRUB CONTROL CHEMICAL APPEARS TO HAVE TWO USES

Ronnel, a commonly used systemic for controlling warble grubs on cattle, increases gain through the improved utilization of feed when added to the diet of cattle, according to information received by Alberta Agriculture from the United States Department of Agriculture.

Animal scientist Dr. Theron Rumsey (Room 132 Bldg. 200 BARC-West, Beltsville, MD 20705, U.S.A.) found that when ronnel was added to the diet of steers, they gained an additional 12 per cent over steers which did not receive ronnel.

The 18 warble-free steers used in the experiment were fed a 70 per cent concentrate for 14 weeks. For the first seven weeks they received 1.75 per cent of their body weight in feed and for the remaining seven weeks they were fed free choice. Half of the animals had ronnel added to their diet.

Dr. Rumsey claims that the cattle on the diet containing ronnel gained more weight than those which received no ronnel and that these results confirm results obtained from a previous trial conducted at Beltsville.

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FOR IMMEDIATE RELEASE

ALBERTA HORTICULTURAL GUIDE

Have you a copy of the "Alberta Horticultural Guide"? If you have not, you are really missing something.

This handy little publication contains cultural and varietal information based on data collected from research stations, horticultural education institutions, professional and amateur horticulturists, commercial horticultural growers and home gardeners. It is designed as a general reference for both rural and urban home gardeners and is applicable to all the climatic soil zones in Alberta.

It contains recommended cultivars and seeding and planting dates for vegetables; cultural notes and recommended fruit varieties and a comprehensive section on ornamental trees and shrubs. The ornamental section tells how to plant and prune deciduous and evergreen trees and lists those recommended for Alberta. It also lists the roses that grow well in this province.

Other sections list recommended ground cover plants, lawn grass varieties, perennial and annual flowers, and contain useful cultural information.

The publication also includes general information on house plants, making compost, controlling garden pests and diseases, controlling weeds, storing garden produce and mulching. The final section consists of a list of reference publications for those who want more detailed and specific information on topics covered in the horticultural guide.

Copies of the 1977 issue of the "Alberta Horticultural Guide" are available from district agriculturists and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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AGRICULTURE

FOR IMMEDIATE RELEASE

A BEAUTIFUL FLOWERING VINE

Clematis is often referred to as the queen of climbing vines because of its attractive leaves and striking blossoms.

A native of China, there are several varieties of clematis which can have pink, purple, white or red flowers. Jackman, a purple flowered variety, appears to be best suited to Alberta conditions.

According to Herman Oosterhuis of Alberta Agriculture's horticultural branch, clematis do best in this province when they are planted on the south side of the house in deep rich soil. An established plant will climb eight to 10 feet in a season, when provided with a trellis of wire netting or similar material, and bloom from about the middle of June to around the second week in July.

In Alberta clematis vines freeze back to the ground every winter, which, because of the plant's fantastically rapid growth, is not a disadvantage. In fact, it is an advantage if you are likely to want to give your house a new coat of paint sometime in the future.

Clematis usually need to be watered regularly because they are planted so close to the foundation of the house, and they should be given a thorough soaking before the onset of winter. The roots should be covered with about four inches of peat moss to protect them from the frost. Mr. Oosterhuis recommends removing the dead vines in the spring before the new growth appears.

Clematis vines are available in pots from most garden supply outlets and can be transplanted to the garden any time during the summer.

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May 23, 1977

FOR IMMEDIATE RELEASE

INDOOR HOUSE PAINTS

If you are in the mood to paint this spring, but do not know where to start, the following information, submitted by Betty Birch, Alberta Agriculture's district home economist at Stettler, may help.

The first thing she advises is to think about the kind of room you want to paint and how much maintenance the walls are likely to receive in the future. Then decide on the kind of paint to use. There are two kinds of paint available for indoor painting: water-based or latex paints and oil-based paints. The former are usually used in bedrooms and in living and dining rooms where they do not get much wiping or washing. Oil-based paints are often used in kitchens and bathrooms because they resist moisture fairly well. Hence, high humidity and washing does not hurt them.

Ms. Birch points out that both types of paint come in flat and semi-gloss finishes but that only the oil-based paint is available in high-gloss. Usually the more shiny the finish, the easier the paint is to clean. Flat paint is difficult to clean because dirt and dust collect in its many tiny pores. Also flat paint may look spotty if small areas are wiped as opposed to washing the entire wall.

"A good rule of thumb," says Ms. Birch, "is that the quality of paint is directly related to its price." In other words, a little extra initial expense will usually save money in the long run. Good quality paint, for example, conceals the existing surface well, covers a large area, withstands washing and resists chipping. There is usually little difference in the price of similar quality oil and water-base paints.

Rollers are recommended for painting a large area and work best with flat paints. A brush is recommended for a small area. Brushes come with natural and synthetic bristles. According to Ms. Birch, a nylon bristle brush with long, closely packed bristles is a good choice.

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Indoor House Paints (cont'd)

If you are painting a new plaster wall, use an oil-based sealer first, and then apply an oil-based undercoat and a final oil-based coat, or two coats of latex paint. Light sanding between the coats makes the next coat adhere better.

A latex-based sealer seems to work best on a new wall-board surface. A latex or oil-based paint as described above can be used over the sealer.

"Before repainting a wall, be sure that its surface is free from dust and grease, advises Ms. Birch. "And watch for drips and brush or roller marks as you paint." She recommends using mineral spirit or turpentine to thin oil-based paints. Water can be used to thin latex paints, but is not usually required.

Soapy water does a good job of cleaning nylon brushes which have been used for latex paint. If the brush has been used for an oil-based paint, it should be washed in mineral spirit and then suspended in a solution of 25 per cent mineral spirit and 75 per cent linseed oil, away from direct heat and sunlight.

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May 30, 1977

FOR IMMEDIATE RELEASE

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May 30, 1977

FOR IMMEDIATE RELEASE

BEEF PASTURE RESEARCH

Scientists at Agriculture Canada's research station at Melfort, Saskatchewan, have been carrying out a series of experiments in an attempt to find out how farmers can make the best use of their pastures, hay and crop residues.

Grazing Systems

One of these experiments, carried out last year, involved comparing the results obtained from two grazing systems. In this experiment 22 steers were divided into two equal groups and grazed on cultivated pastures from June 1 until mid-September. One group was provided with supplemental grain, while the other was grazed under a "put and take system". According to Ross Gould of Alberta Agriculture, scientists use the "put and take system" to arrive at statistical performance data on the basis of animal days rather than on the number of animals that finish the test. In this system the stocking rate is controlled by removing animals when the pasture starts to become over-grazed so that those that finish the test have had a constant supply of high quality forage.

The pastures used in the Melfort experiment consisted of a well fertilized mixture of brome-alfalfa and received about 28 centimetres (11 inches) of rain from April through August. The grazing ratio for the "put and take" steers was limited to 2.7 head per hectare (1.1 head per acre) to maintain the pasture quality, while the steers which received supplemental grain were stocked at a rate of 3.7 head per hectare (1.5 head per acre). They consumed about 1.1 kilograms (2.4 pounds) of grain per day during the last 60 days of the feeding period.

The average daily gains for the "put and take" steers were 0.7 kilograms (1.54 pounds) and for the animals that received supplemental grain it was 0.72 kilograms (1.58 pounds). The fact that these gains were well below the 10-year average of 0.92 kilograms (2 pounds) and 1.06 kilograms (2.3 pounds) for the Melfort station, was believed to have resulted from the over-generous winter feeding program experienced by the steers. The gains recorded for these steers during the previous winter averaged 0.9 kilograms (2 pounds) per day. Mr. Gould reports that it is generally felt calves should gain 0.5 to 0.7 kilograms (1.1 - 1.5 pounds) per day during

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Beef Pasture Research (cont'd)

the winter feeding period if they are to make the most efficient gains on pasture. A rate of gain below 0.5 kilograms (1.1 pounds) per day during the winter feeding period may increase the cost of a pound of gain to the point where it is uneconomical in view of the cost of feed required for maintenance.

Fertilizing Pastures

When the Melfort scientists measured forage yield under the two different grazing systems from an application of 0, 45, 90 and 135 kilograms of nitrogen per hectare, (0, 40, 80 and 120 pounds per acre), they found 90 kilograms per hectare (80 pounds per acre) to be the most profitable rate. Soil tests conducted at the end of the grazing season showed higher levels of both nitrogen and phosphorous, and a higher dry matter yield in the pastures where the steers received supplementary grain. The scientists believe these were due to the larger volumes of manure from the higher stocking rate (the manure added both nitrogen and phosphorous to the soil).

In the fertilizer trials that have been conducted at Melfort over the last four years, it was found that brome-alfalfa plots which received 45 and 90 kilograms of nitrogen per hectare (40 and 80 pounds per acre) yielded less than plots that received no nitrogen. The extra nitrogen seems to increase the growth of bromegrass to the point where it gradually crowds out the alfalfa, thereby reducing the total forage yield. These results indicate that a fertilizer used on a grass-legume pasture should contain phosphorous to help increase the vigor of the legume so that it will not get crowded out of the mixture.

The complete report on pasture research carried out at Melfort last year is available in a publication entitled "Research Highlights - 1976", available from the Canada Agricultural Research Station, P.O. Box 1240, Melfort, Saskatchewan, S0E 1A0.

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May 30, 1977

FOR IMMEDIATE RELEASE

"SURFACE RIGHTS IN ALBERTA"

Can you as a farmer legally refuse to allow on your land a company or a person who has the right to work the minerals under the surface of the land or who has been authorized by some other legislation to construct a pipeline, power line or telephone line?

According to a new pamphlet entitled "Surface Rights in Alberta", you have the right to refuse an operator, as such a company or person is called, admission to your land until a satisfactory agreement has been reached between the two of you, or he has obtained a right of entry order from the Surface Rights Board. However, after having made a reasonable attempt to notify the land owner, a surveyor has the legal right to go on to any land in Alberta to do a survey for the operator. The operator is liable for any damage caused by the surveyor.

In the case of surface leases, the law requires that the proposed lease be left with the farmer for 48 hours so that he can decide whether or not he wants to sign it. If he is not satisfied with the area to be taken, the amount of compensation to be paid, or any other provision in the lease, he can return it unsigned to the operator's representative. If, on the other hand, the lease is satisfactory, or if the farmer can get the terms changed so that it is satisfactory, he can sign it without involving the Surface Rights Act or the Surface Rights Board.

If a farmer decides not to sign a surface lease, the operator has to apply to the Surface Rights Board for a right of entry order covering the portion of the surface required for the well site, access roadway, battery site, pipeline, power line, telephone line, etc. A copy of the application and a notice must be served on the owner and each occupant of the land. In the case of a well site, access roadway, battery site or the opening of a mine, the board may grant a right of entry order after seven days. In the case of a pipeline, power line or telephone line, it may grant a right of entry order after 21 days.

A farmer who objects to a right of entry order can submit his objection in writing to the board regarding any matters except those dealing with the amount of

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"Surface Rights in Alberta" (cont'd)

compensation to be paid.

Upon receiving an objection, the Surface Rights Board will decide whether a hearing should be held before a right of entry order is granted or whether the objection should be made to the Energy Resources Conservation Board. The board will advise the person submitting the objection of its decision.

It should be noted that the Surface Rights Board has no jurisdiction or authority over the location of a well site or mine opening or over the routes of pipelines, power lines or telephone lines. Objections regarding any of these should be made to the Energy Resources Conservation Board, 603 - 6 Avenue South West, Calgary.

Information on determining payment for right of entry or a surface lease; timing of the right of entry payment; legal representation for farmers; appealing a compensation order; the length of time a surface lease or right of entry order remains in effect; collecting for damages caused by the operator after the surface lease has been signed or the compensation order issued; adjusting or reviewing the rental under a surface lease or the annual compensation under a board order; and the non-payment of rental or annual compensation on the date that it is due is contained in "Surface Rights in Alberta". It is available from district agriculturists and the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton T5K 2C8.

Anyone who has questions not covered in this publication can contact the Surface Rights Board in Calgary or Edmonton. The address in Calgary is John J. Bowlen Building, 620 - 7 Avenue South West, Calgary, T2P 0Y8. The address in Edmonton is 16th floor, Century Place, 9803 - 102 A Avenue, Edmonton, T5J 3A3.

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May 30, 1977

FOR IMMEDIATE RELEASE

SCLEROTINIA HEAD BLIGHT RESEARCH FINDINGS

A prolonged period of wet soil in mid-summer, a heavy crop stand and heavy weed growth are the main factors involved in sclerotinia head blight outbreaks in rapeseed crops, according to research carried out by Alberta Agriculture personnel.

Sclerotinia head blight is a fungus disease that attacks many broad-leaved plants including rape. Under Alberta's climatic conditions the sclerotes (tiny, hard shelled fungi) normally remain in the soil where they produce mycelium which attacks the stems of crops like rape. Although this basal infection undoubtedly reduces yields, it does not usually contaminate the seed. Under certain conditions, however, the sclerotes produce spores which become air-borne. When these spores land on rape plants, they may produce a disease in the upper part of the plants, which causes seed contamination.

It was in an attempt to find out exactly what type of field conditions promote the development of these air-borne spores that the research project was initiated last September. Dave Stelfox, in charge of the project, reports that when these conditions were duplicated in laboratory growth chambers, it was found that a prolonged period of wet soil and wet plants that are in bloom were the essential conditions necessary for sclerotinia head blight to develop.

According to Mr. Stelfox, there is very little chance of a head blight outbreak when the weather is hot and dry in late July because the disease can only occur when the crop is in bloom, usually towards the end of July or early in August. He points out that if Alberta farmers were ever to use overhead sprinkler irrigation on their rape crops, there would be a real danger of sclerotinia head blight outbreaks occuring every year.

The Alberta government research also showed that a heavy growth of broad-leaved weeds, either in a rape crop or on summerfallow that will be used for growing rape in the future, poses a serious threat. First, the weeds provide ideal conditions for spore development because they keep the ground moist by shading it, and, secondly, they are very susceptible to the disease. These host plants enable new sclerotes to form which then drop to the ground where they remain as a potential

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Sclerotinia Head Blight Research Findings (cont'd)

source of more air-borne spores. "Chickweed," says Mr. Stelfox, " is one of the worst weeds for promoting spore development because it forms a dense mat over the soil."

Another interesting fact that emerged from the research is that when sclerotes are buried in the ground to a depth of at least two inches, they rot within a year or two, whereas when left near the soil surface they remain viable indefinitely.

It is very probable that, as a result of the above findings, cultural guidelines will be formulated in the near future for those areas of the province that sometimes receive prolonged heavy rains during the summer. Among the factors which will likely be considered are wider seed spacings, and the use of rape varieties that do not easily lodge and that produce light vegetation.

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FOR IMMEDIATE RELEASE

CONTROLLING HORN FLIES ON BEEF CATTLE

Is it profitable to control horn flies on beef cows? According to a study carried out on Nebraska sandhill range cattle, the answer is definitely yes!

Conducted by the Nebraska State University in the United States, the study involved 1,100 good grade Hereford cows that were divided into two equal groups. One group was treated for horn fly control by making them pass under dust bags to get to the fenced-in water troughs, salt and mineral supplement. The other group was left untreated. Calving and breeding as well as the condition, carrying capacity and composition of the two sandhill pastures were as nearly identical as was possible to determine. The management of the two groups of cattle was also identical.

The study was started on June 1 and concluded on November 1. During this period fly counts were made every week on both herds. This was done by observing with binoculars the flies on one side of a minimum of 50 cows.

At the start of the trial horn fly numbers averaged 149 per side on the treated animals and 140 per side on the untreated animals. By the second week, these numbers had dropped to less than 15 per side on the treated group and had increased to more than 750 per side on the untreated group.

On November 1 the steer calves were weighed and sold. The average weight of the steer calves from the untreated cows was 373.74 compared with an average weight of 386.66 for the calves from the treated cows. At that time the average weaned steer calf price on the Omaha Livestock Exchange was $44.53 per hundredweight. Hence, the calves from the treated cows brought $5.75 more than the calves from the untreated cows. The cost of treating the cows ranged between 90¢ and $1.10, depending upon the insecticide and type of bag used. Therefore, the average return on each dollar spent on treatment was about $4.75 per calf weaned.

Since horn flies do not usually attack calves in any numbers, unless the fly population on the older animals is extremely high, the higher gains recorded for the calves from treated cows are believed to have resulted from their having had more milk than the calves in the control group.

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Controlling Horn Flies on Beef Cattle (cont'd)

Alberta Agriculture's entomologist and pest control specialist, Michael Dolinski, reports that research carried out at the federal research station at Lethbridge has shown that horn flies have a similar effect on the weight gains of Alberta cattle.

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Additional Information

The article "Warble Grub Control Chemical Appears to Have Two Uses" (May 23 issue of Agri-News) states that according to information received from the United States Department of Agriculture, Ronnel, a commonly used systemic for controlling warble grubs in the U.S., increases gains through improved feed utilization, when added to the diet of cattle.

It should be noted that the use of Ronnel for this purpose is still in the experimental stage and that it is not licensed as a feed additive in Canada or in the United States at the present time.

May 30, 1977

FOR IMMEDIATE RELEASE

FIELD SPRAYERS

by Andy Birch
Alberta Agriculture's District
Agriculturist at Stettler

Selecting the right herbicide, applying it at the proper time and at the proper rate is essential to good weed control. However, precise application is possible only with a properly calibrated and properly functioning field sprayer.

Following are some of the things to consider when purchasing and operating a field sprayer.

Nozzles

Nozzles are probably the most important component affecting the accuracy of spraying and, therefore, deserve much care and attention when a sprayer is selected or operated There are several types and many sizes of nozzles on the market today.

The most commonly used are the flat spray nozzle tips which produce a spray pattern angle of 65 degrees. A boom height of 21-23 inches is recommended with this nozzle spaced at approximately 20-inch intervals along the boom. Other similar tips are available that provide spray pattern angles of 73 and 80 degrees. A wider spray angle enables a lower boom height to be used, an important factor in reducing spray drift. Another advantage of the reduced height is that the droplets maintain a higher velocity over the shorter travel distance which provides a more uniform and better coverage. The 80 degree tips should be operated at a height of 17-19 inches above the target area.

Flooding fan nozzles have been used for many years for applying liquid fertilizer and more recently for applying herbicides like carbyne to avoid the adverse effects of windy conditions. The nozzles are spaced at 40 inches with a boom height of about 13 inches above the crop. Such tips should be used only when necessary and when recommended by the herbicide manufacturer.

Raindrop nozzles are designed to produce a hollow-coned spray pattern with an angle of 80 to 100 degrees, depending upon the nozzle size and pressure setting. The larger spray droplets make spraying possible when the wind is too strong for spraying with conventional nozzles.

Field Sprayers (cont'd)

Nozzle Sizes

Many of the herbicide manufacturers today are recommending the use of higher volumes of water with their chemicals to reduce the spray-drift hazard. Recommended application volumes now vary from 5-10 gallons per acre for most chemicals. In addition to reducing spray drift, the larger nozzles have lower wear rates, less plugging and less variation in output among the nozzles and provide more effective weed control.

It is unlikely that a single nozzle tip can be used satisfactorily for all chemical applications. Such factors as the rate of application and the allowable forward speed in the field will influence nozzle tip size. As always, read the label and follow the chemical manufacturer's suggestions as to the nozzle tip size to be used.

Brass Versus Stainless Steel Nozzles

Although most field sprayers used today are equipped with brass nozzles, their service life is generally quite short. Recalibration should be done at least every 50 hours. When wettable powders are used, recalibration may be necessary every five hours.

Stainless steel nozzle tips are preferable to brass nozzles. Although they may cost two to three times as much as brass tips, they last far longer and seldom require recalibration. The initial cost of a stainless steel nozzle is compensated for by its longer life (little or no replacement cost), less crop damage and better weed control through a more even distribution of the chemical.

Calibration

To ensure uniform and precise application rates, each nozzle tip should be calibrated. Measuring cups, available from district agriculturists, can be used to properly calibrate each nozzle. The spray from each nozzle is collected over a period of time. From looking at the table on the cup, one can readily determine whether the output is correct. If it varies by more than 5 per cent of the average, or has a distorted spray pattern, the nozzle should be replaced.

Field Sprayers (cont'd)

Nozzle Screens

Nozzle screens should match the size of nozzle tip being used. Although 100 mesh screens are most often used with nozzle tip sizes up to those delivering 0.1 gallons per minute at 40 pounds per square inch pressure, and 50 mesh screens for larger size, field experience shows that plugging problems are usually less frequent with 50 mesh screens. If wettable powders are used, 50 mesh screens should be used for all nozzle tip sizes. Carefully filtering the water as the spray tank is being filled will help to eliminate many plugging problems.

May 30, 1977

FOR IMMEDIATE RELEASE

TAX TREATMENT OF TREE FARMERS

Do you have a woodlot on your farm? If so are you aware of your tax position in respect to its proceeds?

A recent bulletin from the taxation division of Revenue Canada states that owners of farm woodlots may treat the proceeds from the sale of logs, lumber, poles, firewood and Christmas trees as income from farming if the proceeds from the woodlot are minor in comparison to the income from the other farm enterprises.

The bulletin goes on to say that proceeds received from permitting other people to remove standing trees from a farm woodlot are considered capital as opposed to income.

The cost of replanting trees in a farm woodlot is deductible when computing farm income, and an allowance may be claimed for depletion of the woodlot.

If a farmer's established woodlot is so large that the income from regular annual cutting cannot be considered incidental to the income from the other farm interprises, the proceeds received from granting the right to cut and remove the standing timer will be treated as income.

Further information on the tax treatment of farm woodlots is contained in a leaflet based on Revenue Canada's Interpretation Bulletin No. 373 and compiled by Alberta Agriculture's farm management branch. Entitled "The Tax Treatment of Tree Farmers", it is available from the Farm Management Branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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May 30, 1977

FOR IMMEDIATE RELEASE

THE EFFECT OF SMOG ON ALFALFA

Did you know that smog changes the chemical composition of alfalfa plants and reduces their yield?

Studies begun in 1974 at the University of California's Statewide Air Pollution Research Center showed that Eldorado, a smog-tolerant alfalfa variety, yielded only about 66 per cent as much hay in air polluted with industrial and automobile emissions as it did in clean air. A smog-susceptible variety, Hayden, yielded less than 60 per cent as much hay in the polluted air as it did in clean air.

The two alfalfa varieties were grown in pots placed inside open-topped plastic chambers that were 10 feet in diameter and eight feet high. Some of the chambers were in polluted air and the others were in carbon-filtered air. The alfalfa was harvested in seven cuttings from June to January.

Yields of both varieties continued to decline as the smog level was increased. By the fifth cutting some plants had weakened to the point where they died. A subsequent reduction of smog levels did not increase production.

By the conclusion of the experiment, smog had killed over a third of the alfalfa plants in both varieties. The plants that survived averaged 5 to 10 per cent fewer leaves than those grown in clean air.

Tests conducted by the American Agricultural Research Service on harvested alfalfa samples showed that the smog had changed the chemical composition of plants in both varieties. In the smog-susceptible variety, it had reduced the fat by 18 per cent, the fibre by 28 per cent, the carbohydrate by 14 per cent, the carotene by 50 per cent, the vitamin C by 53 per cent and the chlorophyll by 30 per cent compared with the same variety grown in clean air. However, niacin (a component of protein) was higher in smog-grown alfalfas than in those not grown in smog.

Although the percentages of nitrogen, ash, and elements like bromine, copper and potassium appeared to be higher in alfalfa grown in smog, these higher levels

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The Effect Of Smog On Alfalfa (cont'd)

probably reflected the lower concentration of crude fibre and carbohydrates in the smog-damaged plants. The total amount of plant nutrients was much greater in plants grown in clean air than it was in plants grown in smog. However, when rats were fed protein from alfalfa grown in smog, they grew as fast as those fed alfalfa grown in clean air, and no difference was found in the protein digestibility of either variety, regardless of whether it was grown in smog or clean air.

Alberta Agriculture's forage crops specialists, Larry Gareau, says that the yield reductions recorded in the American tests for alfalfa grown in smog emphasize the importance of building alfalfa dehydrating plants well away from industrial centres that cause smog. He also points out that, on the basis of these same tests, it is quite safe to use forage along roadsides for livestock feed even though it has been exposed to automobile exhaust fumes.

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May 30, 1977

FOR IMMEDIATE RELEASE

WATER TREATMENT FOR THE FARM HOME

If you are one of the many Alberta farmers whose domestic water supply requires some form of treatment to improve its quality, investigate before you invest in any water treatment equipment.

This advice comes from Alberta Agriculture's engineering technologist, Andrew Livingstone, who points out that, despite popular belief, there is no 'blanket' solution to the problem of poor water quality. "Water treatment equipment," he says "is designed to treat specific quality problems. Hence, one piece of equipment cannot possibly solve all quality problems."

Hard water, for example, is caused by the presence of calcium and magnesium ions in the water. A water softener softens the water by removing the calcium and magnesium ions and replacing them with sodium ions through a process called ion-exchange.

Iron in the water is another common problem in farm water. It causes brownish stains on bathroom and kitchen fixtures and stains laundry.

If the iron concentration is less than 3 parts per million (ppm), it can usually be removed with a five-cycle water softener, providing the softener is backwashed (cleaned) frequently. If backwashing is insufficient the iron particles will block the filter bed in the softener, rendering it useless.

When the iron concentration in the water is from 3 to 8 ppm, a manganese-greensand filter is required. This type of filter precipitates the iron through oxidation and then removes the particles from the water.

In the case of an iron concentration of more than 8 ppm, chlorine is fed into the water supply and mixed with the water in a retention tank. The chlorine precipitates the iron out of the water, and the resultant particles are filtered out with a sand or activated carbon filter.

The problem of turbid (muddy) water can usually be corrected by feeding alum (aluminum sulphate) into the water supply and then passing the water through a filter.

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Water Treatement for the Farm Home (cont'd)

Tastes and odors can usually be removed from water with an activated carbon filter.

Mr. Livingstone stresses that the correct method and equipment required by a water quality problem depends upon the specific quality of the individual water supply. He points out that technical information and assistance regarding the method and the equipment that should be used can be obtained from agricultural engineering technologists who can be contacted through local district agriculturists.

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May 30, 1977

FOR IMMEDIATE RELEASE

BEEKEEPERS FIELD DAY

Overwintering bees is the theme of the Alberta Beekeepers' Association and the Edmonton Beekeepers' Association field day that will be held on June 26 at Dr. J. Awram's bee farm at Hay Lakes.

Activities will start at 10 a.m. with a two-hour tour of the farm. Two different batches of overwintered colonies, obtained from Mexican bees, and package bees will be on display for tour members.

In the afternoon there will be a panel discussion, chaired by Rene Bergh, a beekeeper from Wetaskiwin, on overwintered bees. Panel members will include Jim Christensen, a commercial beekeeper from north-eastern Alberta who winters bees indoors and outdoors: Ken Guilbault, a commercial beekeeper from central Alberta, who winters bees indoors in Alberta and outdoors in British Columbia; and Joe Cote a hobby beekeeper from southern Alberta who winters his bees outdoors.

There will be some beekeeping displays and equipment on hand at the field day as well as promotional material, being sold by the Alberta Beekeepers Association.

The registration fee is nominal—just enough to cover meals and refreshments—and can be paid upon arrival at the field day. Camping arrangements on a first come, first serve basis have been tentatively made at Miquelon Lake. Additional parking will be available on Dr. Awram's farm.

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May 30, 1977

FOR IMMEDIATE RELEASE

HOBBY GREENHOUSES

Have you always wanted a small greenhouse? If so you will be interested in the publication on hobby greenhouses that is now available through Alberta Agriculture.

It discusses such things as location and construction. Apparently you should have a southern or southeastern exposure if possible. A northern exposure limits the types of plants you can grow.

You can use a wood, steel or aluminum superstructure for your greenhouse or you can purchase a pre-fabricated greenhouse. The covering materials recommended for a small greenhouse include plastic, fibreglass and glass. The cheapest of these is polyethylene film (plastic), but it usually has to be replaced every year. Also, it is not particularly suitable for greenhouses that are used only during warmer weather.

Fibreglass, which is actually reinforced with plastic, is probably more expensive than glass but it is less likely to break. However, glass is still the favorite covering for many people. Clear materials are preferable to colored materials because the latter reduce the amount of light available to the plants.

The walls of a small greenhouse may be constructed of concrete, asbestos board, brick or any other normal construction material. Fibreglass and styrofoam are both popular insulation materials.

In general, electric heaters with fans provide satisfactory heating for a small greenhouse even though they are slightly more expensive to operate than gas heaters.

Further information on constructing a small greenhouse, and a list of recommended books on the subject, is contained in the publication "Hobby Greenhouses" (Garden Fax). It can be obtained from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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June 6, 1977

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COMMUNICATIONS

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June 6, 1977

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IRRIGATION GRANTS ANNOUNCED

Alberta's agricultural minister, Marvin Moore, has announced the awarding of grants totalling approximately $6.8 million to four irrigation districts in the southern part of the province.

Provided from the Alberta Heritage Savings and Trust Fund, the grants are for developing and expanding irrigation in southern Alberta and are part of the $200 million allocation announced in 1975. Priority given to these grants is for upgrading current irrigation works and for expanding irrigation within existing district boundaries as well as in new areas.

"These funds are only available," said the minister, "because of the foresight of this government in creating the Alberta Heritage Savings and Trust Fund." The fund, comprised of savings from current sales of depleting natural resources, is designed to provide money for long term investments in the development of the province so that future generations will benefit from current resource sales. As irrigation is a renewable resource, it is a prime candidate for investment of long term funds.

Irrigation districts receiving the grants are the Eastern Irrigation District, $2,346,782; the Lethbridge Northern Irrigation District, $917,133; the St. Mary River Irrigation District, $3,153,663; and the Taber Irrigation District, $426,123.

Mr. Moore indicated that a much greater interest is developing in irrigation, and that many people are enquiring about the viability of irrigation farming.

Farmers who wish to pursue irrigation projects are urged to contact irrigation district offices or Alberta Agriculture's irrigation division in Lethbridge. Further funds will be provided to other irrigation districts in the near future.

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CLASS A FAIR GRANTS

Alberta's agricultural minister, Marvin Moore, has announced major financial assistance for class A fairs in the province.

Made in accordance with the provisions of the Agricultural Societies Act and the appropriate regulations, these grants are intended to provide operational funds to exhibition associations. In return, the exhibition associations pledge to meet the objectives of an agricultural society to preserve and promote our agricultural industry.

Grants in the amount of $75,000 have been forwarded to the Red Deer Exhibition Association and to the Medicine Hat Exhibition and Stampede Company. Grants in the amount of $100,000 have been forwarded to the Calgary Exhibition and Stampede and to the Edmonton Exhibition Association Limited.

The minister said these additional funds will undoubtedly go a long way towards assisting the exhibition associations to have another successful and rewarding year.

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Alberta

June 6, 1977

FOR IMMEDIATE RELEASE

GRANTS ANNOUNCED FOR CLASS B FAIRS

Marvin Moore, Alberta's minister of agriculture, has announced that class B fairs will receive financial assistance under the Operational Grants Program.

Class B fairs are those held by agricultural societies which involved a minimum payout of $3,000 in prizes for each of the three consecutive years preceding the year of the grant. Six agricultural societies in the province qualify as Class B fairs.

Grants in the amount of $10,000 have been awarded to the Lloydminster Agricultural Exhibition Association Limited, the Camrose Agricultural Society, the Vermilion Agricultural Society, the Grande Prairie Agricultural Society, the Vegreville Exhibition Association and the Olds Agricultural Society.

The grants, intended to provide operational funds for society activities during this fiscal year, will significantly assist and contribute to the successful operation of these societies and their activities.

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June 6, 1977

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WINTER FEEDING AND SUMMER GAINS FOR BEEF CATTLE

Alberta farmers looking for feeders to put on pasture this summer will probably make more profit if they buy healthy, light-weight calves that gained around 0.6 kilograms (1.3 pounds) per day last winter than if they buy heavier animals with a bit of bloom.

This is the belief of Ross Gould of Alberta Agriculture who bases his opinion on research results obtained by the federal research station at Melfort, Saskatchewan. Last year the scientists at Melfort concentrated on the effects of winter diets on summer pasture gains.

The winter diets consisted of long grass-alfalfa hay, ground grass-alfalfa hay, dehydrated (dehy) alfalfa pellets and sun-cured alfalfa pellets. The pellet rations were supplemented with ground wheat straw to bring the protein level up to that of the mixed hay rations, and all the rations were supplemented with 0.9 kilograms (2 pounds) of grain per day.

The highest rate of gain during the winter feeding period was obtained from steers fed dehydrated pellets, ground straw and grain. Their average daily gain was 1.06 kilograms (2.3 pounds) compared with 0.89 kilograms (1.96 pounds) for the steers on ground mixed hay; 0.88 kilograms (1.94 pounds) for the steers on sun-cured alfalfa pellets and 0.78 kilograms (1.72 pounds) for the steers on long mixed hay.

The research also showed that profitability over the winter season was more closely related to the feed efficiency, or feed-to-gain ratio, than it was to rate of gain. The ground mixed hay diet showed the best feed to gain ratio at 7.06/1, while the dehy pellets, long hay and sun-cured pellets produced feed to gain ratios of 7.5/1, 9.22/1 and 8.67/1 respectively.

When performance was balanced against cost, the calves on the ground hay diet produced a return to the operator's labor of $36.97 per head. The profits for the dehy pellet, long hay and sun-cured pellet diets were $20.95, $14.60 and $2.37 per head respectively.

"Cattle feeders," says Mr. Gould, "may look with envy at a profit of over $30 per head, but they should realize that the Melfort researchers started with calves averaging less than

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Winter Feeding and Summer Gains for Beef Cattle (cont'd)

150 kilograms (330 pounds) and paid only 55¢ per kilogram (25¢ per pound) for them. As long as they are thrifty, light calves can usually be expected to put on more profitable gains than heavier animals." Although the calves fed the long hay diet had the lowest daily gains and poorest feed conversion rate, they were more profitable than the calves on sun-cured pellets because the cost of the long hay was so much less than the sun-cured pellets ($53.13 compared with $77.74 per ton).

When they were turned on pasture in June, the calves fed the long hay during the winter showed a daily rate of gain, of 0.67 kilograms (1.48 pounds). They were followed by the calves wintered on ground hay which had a daily rate of gain of 0.62 kilograms (1.36 pounds) on pasture. The calves wintered on sun-cured pellets had a daily pasture gain of 0.6 kilograms (1.32 pounds) and the calves fed dehy pellets averaged a daily pasture gain of 0.5 kilograms (1.1 pounds). "It is interesting to note," says Mr. Gould, "that the calves on the dehy pellets showed the highest gains during the winter, but had the lowest gains when turned out on pasture."

The Melfort station study showed that the calves wintered on ground hay produced the highest net return to labor when they were held over and sold the following fall. It was $59.89 per head. The calves fed on long hay, dehy pellets and sun-cured pellets produced profits of $44.43, $31.39 and $17.44 per head respectively. On the other hand, a feeder who bought the "green" calves wintered on long hay would have picked up $29.83 per head from the summer pasture, while the calves wintered on ground hay, sun-cured pellets and dehy pellets would have produced profits on pasture of $22.92, $15.07 and $10.44 per head respectively.

Mr. Gould says the Melfort results indicate that the type of diet used for wintering calves should be based on whether the calves will be sold as feeders in the spring or off pasture the following fall.

The complete report on this federal research study is contained in the publication "Research Highlights - 1976" available from the Canada Research Station, P.O. Box 1242, Melfort, Saskatchewan, S0E 1A0.

FOR IMMEDIATE RELEASE

RENTAL AGREEMENTS USED BY ALBERTA FARMERS

The Agricultural Input Monitoring System, sponsored by Alberta Agriculture and Unifarm, recently carried out a limited survey on the types of rental agreements being used by Alberta farmers.

A.M. Harvey of Alberta Agriculture's farm management branch stresses that the results obtained from the survey, which was carried out over a large area of the province, are not necessarily representative of the types of agreements being used here because they are based on only 30 questionaire respondents. Also, seven of the respondents had rental arrangements with relatives.

Following are the results obtained from the survey on the rental agreements which are currently in use and which are based on time periods of from one to five years.

- The rented acreage reported in the survey varies in size from one quarter to nine quarter sections. Thirteen of the respondents said they are renting half sections.

- Eighteen of the respondents reported having crop share agreements. The remaining 12 have cash rental leases. Because their terms are so varied, the cash rental leases are not included in this report. However, their terms appear to be related to soil type and the local estimate of land quality.

- Fifteen of the crop share agreements reported in the survey are based on the landlord receiving one -third of the crop, and the tenant receiving two-thirds. In seven of these cases the landlord's only contribution to the operating expenses is his share of the crop insurance. In other cases the landlord pays a third of the fertilizer costs or a third of the weed control costs or a third of both.

- Two of the respondents said that their landlords receive a quarter of the crop, and one respondent said that his landlord receives 40 per cent of the crop.

- Twenty-four of the rental agreements allow the tenants a free choice in cropping, rotation and other land management decisions.

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Rental Agreements Used by Alberta Farmers (cont'd)

. Sixteen of the agreements state that the landlord is responsible for land taxes, building and fence maintenance and insurance on the buildings.

. Nine of the agreements state that the landlord is responsible for land taxes and insurance on buildings, but that the tenant is responsible for building and fence maintenance.

. In three of the agreements building and fence maintenance costs are being shared equally by the landlord and tenant, and the landlord is paying the taxes and building insurance.

. Twelve of the respondents reported that their landlords are providing all grain storage facilities, while nine said that their landlords are providing part of the storage facilities.

. The amount of summerfallow on the rented land varies from nil to 50 per cent of the total cultivated rented acreage. The 50 per cent was reported by five respondents.

More detailed information on land rental arrangements in Alberta can be obtained from your regional farm economists or from the Farm Business Management Branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8. A publication entitled "Agricultural Leasing," prepared by the farm business management branch, is available from the publications office, Agriculture Building.

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MASTITIS CONTROL RECOMMENDATIONS

In addition to eliminating existing mastitis infections in cows during their dry period, control of this disease should be based on preventing new infections during lactation.

This concept, plus the fact that good sanitation continues to be of primary importance in controlling mastitis, was stressed at the Ohio State University in the U.S. during a recent meeting of British and American dairy specialists. According to Dr. Frank Baker, extension veterinarian with Alberta Agriculture, the scientists were called together to discuss the latest developments in the treatment and control of mastitis, a disease which is estimated to cost the North American dairy industry millions of dollars a year.

Although the scientists felt that such factors as nutrition, stress and climate probably play an important part in new infections, they agreed that there is insufficient evidence at this time to assess their influence. However, the specialists said that the type and state of the environment can greatly influence the incidence of new infections, and they stressed cleanliness as related to personnel, utensils and housing.

The proper preparation of the cow's udder prior to milking to facilitate milk letdown, and to avoid gross milk contamination, was also emphasized. It was pointed out that the udder should be washed and dried before a cow is milked, and that the teats should be dipped in a sanitizing solution as soon as the milking machine is removed. Some effective sanitizing preparations currently available are 0.5 to 1 per cent iodophor, 4 to 5 per cent sodium hypochlorite and 5 per cent chlorhexadine.

Other factors which have been found to strongly influence the incidence of new mastitis infections are the design, installation, use and maintenance of milking machines. They should be operated and maintained in such a way that they remain clean during milking.

The ideal milking machine system, according to the scientists, should have thin-walled, narrow bore, stretched liners with a mouthpiece that does not restrict the teat base.

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Mastitis Control Recommendations (cont'd)

It should have a pulsator action that permits at least a 40 per cent rest phase and allows the complete opening and closing of the teat sphincter. It should also have a stable vacuum at the teat and allow the milk to flow by gravity into a weight jar or low line. Finally, it should operate in such a way that it does not allow the teat cups to suck on an empty udder, and it should have a large enough capacity to prevent the claws and milklines from becoming flooded.

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NEW TREE LIST OUT

Alberta Agriculture's tree list and application forms for farm shelterbelt planting in 1978 are now available from all district agriculturists. The deadline for ordering these trees is November 1 of this year.

Herman Oosterhuis, in charge of the provincial tree planting programs, reports there will be a good supply next spring of such tall-growing deciduous trees as poplars, willows, Manitoba maples and green ash. There will also be a fairly good supply of lodge pole pine and Colorado spruce, the latter of which was not available for the last two years. The supply of caragan will also be good, but the supply of honeysuckle, lilac and dogwood will be limited. Unfortunately, none of the small deciduous trees like mayday and hawthorn will be available.

Under the government's present tree distribution policy, farmers have first priority over acreage holders for available trees. The tree varieties that will be available to acreage holders in 1978 include poplars, willows, green ash, Manitoba maples and Colorado spruce.

Mr. Oosterhuis urges people ordering trees for next spring's planting to plan their shelterbelt carefully before submitting their orders. He explains that the demand for trees has been outstripping the supply during the last few years, and that this situation could be alleviated if people would not overorder. A tree survival survey carried out by Alberta Agriculture revealed that a large percentage of shelterbelt trees are lost each year because they have been planted too close together, and that many shelterbelt trees never fulfill their potential because of overcrowding. Mr. Oosterhuis urges prospective tree applicants to plan their plantings in accordance with the spacings listed on the reverse side of all application forms.

To help farmers and acreage holders ordering trees to obtain better results and to avoid waste, district agriculturists are distributing with the tree lists and application forms a publication entitled "Planting Farm, Field and Roadside Shelterbelts in Alberta". It contains abbreviated information on shelterbelt layouts and includes recommended variety combinations and spacings. District agriculturists also have photograph albums in their offices which show individual shelterbelt tree varieties, and the type of shelterbelt that can be expected from various

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New Tree List Out (cont'd)

varietal combinations.

Mr. Oosterhuis reminds farmers and acreage holders that they must summerfallow next spring's shelterbelt planting site this summer to qualify for government trees. Many county officials send out inspectors to see that the proposed planting site has been summerfallowed, and summerfallowed properly, before accepting applications.

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FAIRY RING CONTROL

This is the time of year when fairy rings appear on lawns and fairways. They are dark green rings surrounding unthrifty or dead grass.

Fairy rings are caused by a mushroom-producing fungus that does not directly attack the grass, but lives on organic matter in the soil. Low fertility and lack of moisture tend to promote the disease, which is most common in turf that has been established for five or more years.

The fungus grows by means of a white thread-like network in the soil. Varying in depth from one inch to one foot, this fungal growth prevents water from penetrating the soil,with the result that the grass growing immediately above it eventually dries up. However, as the fungus moves outward through the soil, the originai section dries up,and the grass and weeds re-establish themselves inside the ring. Most fairy rings have a diameter of from two to 15 feet, which expands at a rate of a few inches to a few feet a year.

Control

Since the cause of grass damage is from dehydration, the suppression of fairy rings is probably more practical than their eradication. The following procedure is recommended by an official of Alberta Agriculture.

- Perforate the dead grass and the surrounding dark green bands to a depth of about one foot. This can be done with a garden fork or hand aerifer.
- Water the perforated area at least every other day for a month or more to ensure complete and prolonged soaking. The perforated area will eventually become mushy and can be easily penetrated again if it was not possible to penetrate it to the required depth the first time.

Eradication

If only a few rings are present, it may be practical to eliminate the fungus completely. Although this method is laborious, it is effective if done properly. The following procedure is suggested:

- Remove the soil beneath the affected area, being careful not to spill any of the turf or soil on the rest of the lawn.

Fairy Ring Control (cont'd)

- Make sure the soil is removed to below the white fungal growth. This may entail removing a considerable amount of soil since the growth often extends to a depth of a foot or more.
- Replace the excavated soil with fresh topsoil and returf or resoil the area.

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BALCONY GARDENING

The interest in balcony gardening is growing every year with the increasing number of people who live in apartment buildings.

Apartment dwellers are using flower pots, hanging baskets, planters, window boxes and wooden tubs to grow annual flowers, vegetables and even shrubs on their balconies. The best containers are those made of a porous material like clay or wood, and that provide good drainage, but plastic containers can also be used.

Flower pots six to 10 inches in diameter can be used to grow radishes, lettuce, chives, parsley and a large variety of herbs. Planters, window boxes and wooden tubs make good containers for such things as tomatoes, cucumbers, peppers, green beans, spinach and strawberries.

The varieties of annual flowers that can be grown in a balcony garden are almost unlimited if the balcony has a southern exposure and is protected from prevailing winds. Balconies facing north are really suitable only for foliage plants because all plants that bloom require some sunshine. Most vegetables also require some sun, but things like lettuce, chives, parsley and herbs will usually grow reasonably well on the north side of a building.

Some balcony gardeners have successfully grown dwarf evergreens like pines and junipers. They are usually brought inside for the winter, but some have been successfully wintered outside, even in our northern climate,when they were given a thorough watering just before freeze-up and protected from the wind.

Because of the limited amount of soil in any plant container, it is necessary to use more fertilizer than would be the case in a flowerbed or vegetable garden. A fertilizer such as 20-20-20 or a slow release fertilizer in either powder or pellet form are suitable for use in balcony gardens. Frequent (four to six weeks apart) light applications are better than one heavy application at planting time because of the danger of burning the plants' roots.

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Balcony Gardening (cont'd)

The small volume of soil in most plant containers used on a balcony make it necessary to water the plants more often than would be necessary in a garden. They should be given enough water at each watering to allow the water to run out of the bottom of the container.

A mixture of topsoil and peat moss with 20 to 25 per cent sand or vermiculite makes a good growing medium for plants grown in containers. The sand prevents the soil from becoming so tightly packed that it prevents water and oxygen from reaching the plant's roots.

Since knowledge about what can, and what cannot, be grown in a balcony garden is still limited, anyone who has had particular success with this type of gardening in a northern climate, or who has grown unusual types of plants this way, is invited to write to P.D. McCalla, Horticultural Branch, Agriculture Building, 9718 - 107 Street, Edmonton, Alberta, T5K 2C8.

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REGIONAL FARM TRAINING SPECIALIST APPOINTMENTS

The director of the Alberta Agriculture's extension division, J.G. Calpas, has announced the appointments of Don Chinski, Walter Scott and Roger Melnick to the recently created farm training specialist positions in the division. Messrs Chinski, Scott and Melnick will be located at Barrhead, Vermilion and Red Deer respectively.

The new appointees will be responsible on a regional basis for planning, co-ordinating and administering a variety of farm training programs including the Green Certificate Farm Training Program, the Japanese Dairy Exchange Program and the Eastern Canadian Agricultural Exchange Program. They will also provide a liaison with the International Agriculture Exchange Program. Their involvement in the programs will include developing training programs, interviewing, selecting and counselling individuals interested in pursuing agriculture as a career and presenting regional training seminars for trainers and trainees. They will also be responsible for a liaison with Canada Manpower and Alberta Advanced Education and Manpower (and regional colleges) which have a major involvement, particularly with the Green Certificate Program.

On-farm training programs in Alberta and their success depend on the proficiency, expertise and co-operation of trainer and host farm families. There are more than 500 Alberta farmers involved in various training and exchange hosting situations. It is this over-all dimension of Alberta Agriculture's involvement in this aspect of farm management training which these specialists will be responsible for administering and co-ordinating in their respective regions.

Don Chinski

A native of Saskatchewan, Don Chinski attended the University of Saskatchewan and holds a B.A. (major economics) 1972 and has completed the course work towards a B. Comm. Immediately after graduation in 1972, Mr. Chinski joined the information analysis branch of Canada Manpower and Immigration as an assistant economist. Later that year, he transferred to the Unemployment Insurance Commission as an insurance officer where he adjudicated

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Regional Farm Training Specialist Appointments (cont'd)

claims and interpreted guidelines. The following spring, he joined the Department of Regional Economic Expansion as an administrative officer and remained in that position until September of 1973 when he rejoined the Unemployment Insurance Commission. In August 1975, he transferrred to Agriculture Canada as a rural development counsellor. He was seconded to Alberta Agriculture and worked at Barrhead until his present appointment.

Walter Scott

A native of Germany, Walter Scott attended both high school and university in Alberta following immigration to Canada. He holds a B.A., (major rural sociology) 1967 and an M.A., (community development) 1970 from the University of Alberta. While attending university, he worked for six years as a supervisor and director of rural recreation programs in the Northwest Territories and Alberta on a part-time basis. In June 1971, he joined the Northwest Territories Commission on a full-time basis as a settlement manager and area administrator at Aklavik and Fort Macpherson. In August 1973, Mr. Scott was recruited by Agriculture Canada as a rural development officer. He was seconded to Alberta Agriculture and worked at Vermilion until his present appointment.

Roger Melnick

Roger Melnick is a native of Manitoba and holds a B.A. 1970, B. Ed. 1971 and obtained an honors diploma in agriculture in 1973 from the University of Manitoba. Prior to attending university, he taught school in The Pas, Manitoba, for two years. He was employed by the Department of Indian Affairs and Northern Development as a teacher and guidance counsellor for seven years. While completing the course work for the diploma in agriculture, Mr. Melnick maintained a farm at St. Eustache, Manitoba. Following his diploma year, he taught a basic course in agriculture for the province of Manitoba. In April of 1974, he joined Canada Agriculture as a rural development counsellor and was seconded to Alberta Agriculture. He worked at Camrose until his present appointment.

The transfers of these three men brings to a total of 10 the number of employees transferred from the federal Small Farm Development Program in the past year.

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FLY CONTROL PROJECT IN ANTIGUA

Flies! They are the reason Joe Gurba, head of Alberta Agriculture's pest control branch, recently spent six weeks in Antigua, West Indies, as a volunteer with the Canadian Executive Service Overseas (CESO).

CESO is a non-profit organization operated by a group of Canadian business leaders and supported by the Canadian government through the Canadian International Development Agency. The majority of its volunteers are retired people who use their talents and experience to help developing nations to solve technical and production problems so that they can achieve a more equitable position in the world market place.

J. B. Gurba, head of Alberta Agriculture's pest control branch

CESO volunteers have completed about 1,400 projects in 33 developing countries since the organization was formed 10 years ago. Volunteers are sent to a country in response to a specific request from the public or private sector of that country and serve a maximum of six months on a project. At the present time CESO volunteers are working in India, North Africa, the West Indies, South America, the Philipines, Korea and many other countries. They also work with Canadian Indian bands who want advice on commercial undertakings similar to those overseas.

The project that took Mr. Gurba to Antigua involved the elimination of a fly infestation at one of Antigua's well-known motels. In spite of every effort on the part of management, the problem became so bad that the motel was forced to close from May to December of last year. The owner then appealed to CESO for help, and Mr. Gurba was selected for the project. He was given leave of absence from his job by Alberta Agriculture, which has an agreement with CESO to provide personnel for occasional short assignments.

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Fly Control Project in Antigua (cont'd)

Mr. Gurba's main plan of action involved finding the source of the infestation before trying to bring the flies under control. He discussed the problem with local government personnel and exterminators and with other hotel managers, all of whom gave him their full support.

He then surveyed all possible breeding sites which included nearby livestock operations, a riding stable, outdoor toilets, an adjacent salt swamp and the garbage disposal area. He also collected flies in and around the motel to determine the species involved and their possible origin. Finally, he tested a variety of insecticides and control methods for their effectiveness and for possible fly resistance.

The search for the source of the motel's fly population, thought to have been the swamp, finally narrowed down to the garbage disposal area. An inspection here showed that all the shallow disposal pits contained empty pupal cases from which thousands of adult flies had emerged during the last year.

The solution to the problem involved a number of steps. They included training those in charge of the motel's garbage disposal in the habits of flies, outlining simple, but important, procedures in the handling and disposal of garbage, and arranging for the garbage to be collected at least twice a week. It was agreed, however, that if for some reason it became impractical to have the garbage removed, it should be incinerated and buried in pits that were at least four feet deep and covered with two feet of compacted sand so that any flies that might hatch would not be able to escape as had been the case with the shallow pits of the past.

Mr. Gurba also demonstrated that insecticides must be used in conjunction with eliminating the main source of a fly infestation. He recommended those products that appeared to be most effective under the local conditions.

The fly problem at the motel on Antigua is now under control, and the owner is very pleased with the results he obtained from his appeal to CESO. Mr. Gurba is equally pleased with his experience which he found challenging, rewarding and most enjoyable.

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Fly Control Project in Antigua (cont'd)

Anyone in Alberta who would like to work as a CESO volunteer overseas or with Canada's Indian bands should contact Rodney Pike, co-ordinator, Canadian Executive Services Overseas, 230 Imperial Oil Building, 10025 - Jasper Avenue, Edmonton, T5J 1S9.

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June 13, 1977

FOR IMMEDIATE RELEASE

FROZEN EMBRYOS SHIPPED TO COSTA RICA

A new dimension has been added to livestock production by the development of a reliable embryo-freezing technique.

Alberta Agriculture has learned that a recent project of Alberta Livestock Transplants Ltd. (ALT) at Calgary resulted in 17 pregnancies from a group of 51 frozen cattle embryos (33.3 per cent success rate). While a 50-60 per cent pregnancy rate is the commercial norm for transferred non-frozen embryos, this result has to be considered a significant success. The embryos were processed and transplanted at ALT's Calgary laboratory during November 1976, with pregnancies verified early in 1977. Freezing was carried out by a modified Cambridge technique utilizing a specially programmed freezer unit. Veterinary aspects were managed by Drs. Gerald Ollis and Mark Jacobson, while the freezing and embryo handling procedures were performed by Drs. Brian Shea and Alan Trounson. The success was achieved after several years of research.

ALT is now storing (in a frozen state) bovine embryos from select matings. These will be available for transferring to recipients in the domestic or international market as conditions dictate.

The freezing breakthrough makes top-quality livestock more readily available to all areas of the world. ALT has already executed a pilot project which saw the movement of frozen bovine embryos from Canada to Costa Rica during March 1977. Several successful pregnancies have resulted from the frozen embryos being transplanted to recipient cows in that country. Economic implications of this project may have an impact on other international livestock movements. For example, 50, 100, or even more bovine embryos could be transported by air in a nitrogen tank from Canada to Argentina for about $130. The savings involved (when compared to moving mature livestock) make this technique viable even at presently achieved pregnancy rates.

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Frozen Embryos Shipped to Costa Rica (cont'd)

While embryo-freezing technology is still in its infancy, it may provide significant opportunities for herd improvement programs. In transplant programs, feed and maintenance expenses could be reduced as the carrying of large recipient herds necessary to supply sufficient cows with synchronized heats could be considerably reduced. The required number of embryos could be thawed from storage to correspond to the number of recipients in heat for a particular day.

The freezing of embryos also aids in marketing flexibility. Embryos collected from good quality seedstock cows during periods of low cattle prices could be stored in a frozen state, and later implanted in recipients, if and when markets improve.

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FOR IMMEDIATE RELEASE

MINIMUM AND ZERO TILLAGE

Increased crop yields over the past two decades have been achieved at the expense of a considerably increased energy input in the production process.

Keith Price, weed control specialist with Alberta Agriculture, reports that recent data from Europe indicate that wheat yields in that part of the world increased by 50 per cent between 1950 and 1971, and that the energy input required to produce this increase went up by 230 per cent. Perhaps it is figures like these, combined with the increased concern about our depleting energy reserves, that are responsible for the current interest in reduced, or even zero, tillage systems.

The minimum and zero tillage systems of cropping are not completely new. Both British and American farmers have been using them for at least 10 years and have found, as with other cropping systems, that there are advantages and disadvantages.

Mr. Price thinks that minimum and zero tillage should be called concepts rather than systems because there is no one system that will suit all conditions. He also believes that farmers are going to have to change their basic attitude towards cultivation before they will be able to accept these concepts. Cultivation is not inherently good for the soil as many people believe. In fact, it is actually harmful to the soil. Only when this fact has been accepted will farmers be ready to consider alternative methods of crop planting and weed control and to cut out unnecessary tillage operations.

Soil scientists recognize that tillage destroys the soil structure and the organic matter in the soil. Long-term effects can include a lower water infiltration rate, increased water run-off, lower moisture holding capacity and reduced fertility. The basic effect on the soil shows up as increased wind and water erosion, thinner crop stands and a tendency for the soil to bake and crack. Many farmers automatically work up soil which has formed a crust, and so the vicious circle continues. In essence, the more the soil is tilled, the more it will have to be tilled.

Since minimum and zero tillage entails replacing tillage operations, wherever possible, with alternative practices, specially designed seed drills have been built which seed

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COMMUNICATIONS

Minimum and Zero Tillage (cont'd)

directly into the stubble. They eliminate seedbed preparation and post-seeding harrowing. Nitrogen is provided for the crop by an application of manure, compost or chemical fertilizer rather than by oxidation of the organic matter in the soil.

Weed control in minimum and zero tillage systems is achieved with herbicides and is aided under zero tillage by the nature of the weeds themselves. Since annual weeds prefer to grow in disturbed soil, tillage actually creates ideal conditions for them. Tillage also places their seeds deep in the soil and can induce dormancy. In subsequent years these seeds can be brought to the surface through tillage and produce a new crop of weeds.

Because perennial weeds usually increase under minimum and zero tillage systems,they must be controlled with herbicides. It is the new herbicides that have been developed to control perennial weeds (they leave no soil residue) that have made minimum and zero tillage feasible.

Mr. Price stresses that because minimum and zero tillage will not solve problems associated with poor soils, they should be tried first in the best and cleanest fields. He also advises anyone considering minimum or zero tillage to first obtain a no-till planter with a fertilizer banding attachment, a straw chopper and a good weed sprayer and to be prepared to devote at least three years to the trial. "It will take at least that long for the structure, fertility and weed population to stabilize," he says.

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June 13, 1977

FOR IMMEDIATE RELEASE

BULL TESTING

All bulls, and especially those that have been recently purchased, should be evaluated for breeding soundness before the breeding season commences.

Dr. F. P. Baker, beef cattle extension veterinarian with Alberta Agriculture, strongly recommends this procedure to ensure a good calf crop the following spring. He stresses that the evaluation should include a microscopic examination of the semen and a physical examination of the whole animal. "A bull that cannot travel, mount and serve a cow is useless, no matter how high the quality of his semen," says Dr. Baker.

Semen can be collected for examination by the electroejaculation method or with an artificial vagina. According to Dr. Baker, the electroejaculation method is by far the most commonly used. Carried out by a veterinarian, it entails stimulating the bull with a special machine to produce semen which is collected and examined under a microscope. It is evaluated for such factors as volume, number of sperm, motility (activity) and morphology (shape).

Veterinarians are trained to evaluate bulls for breeding soundness and are able to advise cattlemen on the suitability of a specific individual. "To turn a bull out with cows without being reasonably sure of his breeding capability," says Dr. Baker, "is a gamble that cattlemen cannot afford to take. The realization halfway through the breeding season that a bull is not capable of settling the cows is an unnecessary frustration and disappointment. A little time and money spent on testing bulls before the breeding season starts will pay good dividends next spring."

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June 13, 1977

FOR IMMEDIATE RELEASE

THE PROMISE OF HYDROPONICS

by Dr. George Collin, former director
of the Alberta Horticultural
Research Center, Brooks

Popular articles identify hydroponic farming as a new, simple and profitable technique for growing crops. Moreover, hydroponic farming is often described as a keystone of agriculture in ecological models of the future. Complex plant factories are described, combining hydroponics, artificial lighting and assembly plant technology, that promise economic crop production for even remote desert and arctic areas.

In fact, botanists described and used hydroponic systems more than 40 years ago; systems in which soil and rain water as nutrients for plants were eliminated. In their place, plant roots were fed with a bath of aerated nutrient solution. This system is called by a variety of names: hydroponic farming, nutrient solution culture or simply nutriculture.

In a natural environment, the soil provides a growing plant with many factors:

- an anchor for roots to support stems and leaves of a plant in sunlight.
- an environment of nutrients dissolved in soil water and aerated with essential oxygen for root growth.
- a source of water and nutrients for plant growth.

The ideal soil provides a remarkable environment for a slow release of available nutrients from organic matter, a balance of beneficial and disease organisms, and an aggregation of soil particles to ensure a balance of water and air. Hydroponics, in comparison, is an artificial system completely lacking the natural balances of a well managed soil. Botanists developed the hydroponic system for critical nutritional research. Some promoters developed commercial hydroponic systems for profitable sales.

Even the simplest system contains at least five pure chemicals carefully weighed and dissolved in good quality water. These chemicals must be replenished by checking nutrient concentrations, conductivity and pH measurements. The nutrient solution of chemicals must be aerated constantly, with air bubbles from aquarium pumps or by pumping the solution up into stones or sand where roots grow, and then draining. Ideally, the solution should be heated to maintain best root growth. The solution must be kept in the dark to prevent algae from growing and fouling the system.

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The Promise of Hydroponics (cont'd)

In all these systems there is a constant threat of crop loss from pump failures, power interruptions, imperfect monitoring and the fast spread of disease from plant to plant carried by the circulation of the nutrient solution.

There are five commercial hydroponic farms in Alberta today. All are enclosed in greenhouses to ensure the longest possible growing season and an environment for high yields. All the greenhouses are located in southern Alberta where longer hours of sunshine make greenhouse production more profitable than in the north. These five hydroponic farms total only 50,000 square feet or slightly more than one acre in area. Most started production with greenhouse tomato crops. Now, costs of production in comparison to winter imports from Mexico, have forced owners to grow and market ever higher-valued crops of seedless cucumbers and cut flowers.

Despite popular claims, crop yields from these hydroponic farms have not been much greater than from conventional greenhouses. Moreover, the nutritional value of these crops have not been superior to food from plants grown in soil.

Darell Shaw, greenhouse specialist at the Alberta Horticultural Research Center at Brooks, is experimenting with a much simplified hydroponics system called nutrient film culture. This technique was first tested by a British scientist, Dr. A.J. Cooper, in 1971. Its simplicity and low capital cost have created renewed interest throughout the world. In this simplified system, plant roots grow in a shallow stream of warm nutrient solution, formed from black, plastic film which encloses the crop roots. The nutrient solution is collected from the low end of the trough and pumped back to recirculate through the plastic trough. Experimental crops of tomatoes, cucumbers, chrysanthemums and carnations have been grown successfully in nutrient film culture. A very important aspect of nutrient film culture is the saving in labor and energy needed to sterilize and prepare soil in a conventional greenhouse, or gravel in a hydroponic operation.

Again, the promise of a system where soil is not needed for crop production catches man's imagination. Hopes are renewed in the possibility that crops may be grown where soil has failed or does not exist. Moreover it is a fact that a simple trough of narrow, black plastic film to support the plant can be manufactured for pennies, and assembly line systems of crop production are

The Promise of Hydroponics (cont'd)

predicted to reduce labor costs. Technologists are now developing and testing an automatic method to control the pH and conductivity of the nutrient solutions. This development could simplify the real problem of maintaining the nutrient solution in hydroponic farming.

(From the January issue of "People Plans and the Peace" published by the Peace River Regional Planning Commission, Grande Prairie, Alberta.)

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June 13, 1977

FOR IMMEDIATE RELEASE

HYDROGEN SULPHIDE REMOVAL

The presence of hydrogen sulphide in water is a fairly common problem in Alberta.

Although the levels at which it occurs in water is not hazardous to health, this gas gives the water a very unpleasant taste and odor - rather like rotten eggs. It also corrodes pipes turns,silver black and can destroy the resin in water softeners.

According to Ken Williamson, Alberta Agriculture's engineering technologist at Leduc, hydrogen sulphide can be present in water naturally or it can be caused by iron and sulphur bacteria. Sometimes it is present only in hot water. In this case it is caused by an electro-chemical reaction between the sulphates in the water and a magnesium rod in the hot water heater. Removing the rod,which will nulify the warranty,is usually worthwhile to rectify the problem.

With so many possible causes of hydrogen sulphide in water, where does one start? Because the problem is frequently caused by iron or sulphur bacteria, Mr. Williamson recommends using the treatment for controlling bacteria first. Shock chlorination is the standard method for removing these bacteria from a domestic water supply system. Complete information on this method is contained in the Agri-fax publication 716 (D 12) "Iron Bacteria and Shock Chlorination", available from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

Since there are four possible ways of eliminating hydrogen sulphide that occurs naturally in water, and since each depends upon the chemicals present in the water, the most practical approach is to have your water analyzed. Then ask your local agricultural engineering technologist to interpret the analysis and recommend one of the following methods.

The chlorination and activated carbon filter is the most frequently used method of removing hydrogen sulphide from water. With it you install a chlorine feeder and an activated carbon filter in the water system. The hydrogen sulphide is oxidized by the chlorine and the

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Hydrogen Sulphide Removal (cont'd)

insoluble sulphide particles are removed by the activated carbon filter. The filter also removes any residual chlorine after oxidation has been completed.

Another method of removing hydrogen sulphide from water is to install a chlorine feeder and a sand filter. The hydrogen sulphide is oxidized by the chlorine, and the insoluble particles are removed by a sand or crushed anthracite filter.

If the level of hydrogen sulphide is not too high (over 5 miligrams/litre) an iron filter (manganese greensand or aridsorb) will solve the problem. This type of filter oxidizes the hydrogen sulphide and filters out the resulting sulphide particles.

The aeration method is recommended for water which contains additional dissolved gases. In this method, aeration is achieved by spraying water into a ventilated storage tank. The hydrogen sulphide separates from the water as the water is sprayed into the tank and either settles as sulphide particles or is drawn off as a gas by the ventilating system. A second pressure system is required to pump the water from the storage tank.

Information and advice on all aspects of your water supply system and on your sewage disposal system can be obtained from your agricultural engineering technologist. He can be contacted through your district agriculturist.

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June 13, 1977

FOR IMMEDIATE RELEASE

MACHINERY EVALUATION REPORTS

Are you interested in receiving farm machinery evaluation reports from the Prairie Agricultural Machinery Institute (PAMI) in Lethbridge?

PAMI was established in Alberta, Saskatchewan and Manitoba in 1974 to improve the design of farm machinery and to help Prairie farmers in their selection and use of it.

Evaluation reports are now available on 10 grain moisture metres, two self-propelled windrowers and a pneumatic grain conveyor. There is also a bulletin on magnetic seed treaters. Evaluation reports on field sprayers, combines, round balers, round bale handlers and tub-grinders are expected to be released shortly.

PAMI staff are now testing cultivators, drills, combines, balers and several other machines as well as working with a number of manufacturers and other agencies on confidential machinery-related projects. The first of the machinery evaluation reports are expected to be available by mid-fall.

If you would like to receive PAMI's machinery evaluation reports, or the bulletin on magnetic seed treaters, contact the Prairie Agricultural Machinery Institute, Science Building, Lethbridge Community College, Lethbridge, T1K 1L6.

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FOR IMMEDIATE RELEASE

BEEF MARKET INFORMATION CENTRE

The Alberta Cattle Commission's recently opened market information centre provides prices recorded by telephone three times a day and available on a 24-hour basis for slaughter and replacement cattle.

The morning message, recorded by 10:30 a.m., gives the previous day's fed cattle prices in Alberta; current Toronto slaughter cattle prices; current U.S. cattle prices and the Chicago Mercantile Exchange mid-session fed cattle futures prices.

The noon message, recorded by 12:30 p.m., gives fed cattle prices in Alberta from the previous day's sales; current terminal market prices in Canada and a summary of the previous day's country auction market trade.

The afternoon message, recorded by 3:30 p.m., provides a daily wrap-up of price information from Alberta; other markets in Canadian and U.S. markets. On Fridays this summary includes such comments on the beef trade as the Montreal wholesale beef price settlements.

The Cattle Commission's new information service is an improvement on other price information services because it gives: direct sales prices for steers and heifers on a provincial basis; earlier Toronto terminal prices; earlier American trade, live and futures prices; a daily overview of Alberta's country auction trade and a weekly summary and general comment on the beef trade.

The above price information can be obtained by calling the toll-free number 1-800-222-6512. However, people in the Edmonton flat-rate calling area should dial 469-1650.

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June 13, 1977

FOR IMMEDIATE RELEASE

INSECTICIDE SAFEGUARDS FOR BEES

The incidence of accidental bee poisonings from insecticides will continue to grow as the use of these products increases unless some type of safeguards are adopted.

This is the opinion of Dr. Ulf Soehngen, supervisor of apiculture with Alberta Agriculture. He says it is very important that beekeepers and pesticide applicators work together to solve this problem before it gets out of hand.

He urges beekeepers to register the legal land description of their apiary sites with their county or municipal office so that the information will be on record when pesticide applicators check for the location of beeyards before spraying. "Ideally," says Dr. Soehngen, "there should be a central registry in each county and municipal district where beeyards are located, and where crop spraying is an annual event. If beeyards were registered with such an agency, a pesticide applicator could telephone the registry and say he planned to spray in a particular area on a particular day. The registry staff could then notify all beekeepers whose bees were likely to be affected so that they could take precautions.

If a beekeeper has enough advance notice that fields near his beeyard are going to be sprayed, he can confine his bees by covering their hives with wet burlap bags. He can leave them covered for as long as two or three days if necessary, even though keeping the burlap wet is no easy task when a number of beeyards, several miles apart, are involved.

A beekeeper who is given adequate notice can also move his bees to another location if one is available, and if he has the necessary moving equipment. Although there is a risk of losing queens when hives are moved early in the season, and it is very difficult to move them in mid-summer when they contain 100 to 150 pounds of honey, it can be done with adequate notice.

"The more time a beekeeper has to take precautions against insecticides, the better; but he must have at least 24 hours notice," Dr. Soehngen says.

Dr. Soehngen urges pesticide applicators, regardless of whether they are farmers or commercial applicators, to check with the municipal or district office in the area where they

- (cont'd) -

Insecticide Safeguards for Bees (cont'd)

plan to spray to find out whether there are any beeyards in or near the area.

Precautions an applicator can take when beeyards are present include: applying the insecticide in the morning or evening when bees are flying; avoiding spraying or dusting crops that are in full bloom or adjacent to the crop being worked by bees; using the insecticide that does the least damage to bees when there is a choice (liquid rather than dust); avoiding spraying when the wind is high; and learning as much as possible about insecticides from the point of view of bees and following suggested precautions carefully.

Dr. Soehngen asks farmers and commercial pesticide applicators to be very careful when disposing of unused products, regardless of whether they are in liquid or dust form, and to be careful about water contamination when cleaning their tanks. He points out that honey bees require a great deal of water, especially when nectar is not readily available, and that they will get it from any convenient source. These include running water, sloughs, puddles, troughs, barrels etc. If this water happens to be contaminated with an insecticide, the result can be disastrous.

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FOR IMMEDIATE RELEASE

PUBLIC HEARING INTO GRAIN TARIFFS AND CHARGES

The Canadian Grain Commission will hold a public hearing into proposed increases in grain handling tariffs and terminal storage charges at 1:30 p.m. on June 17 at the Airliner Inn in Calgary.

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FOR IMMEDIATE RELEASE

GAS BARBECUES

Although gas barbecues are not as rustic looking as the traditional barbecue, they still impart a barbecued flavor to your meat.

Betty Birch, Alberta Agriculture's district home economist at Stettler, explains that the fuel in a gas barbecue heats imitation coals which supply the radiant energy that cooks the meat. "It is the fat dripping onto these coals and burning there which gives the barbecue flavor associated with a conventional barbecue," she says.

After the initial expense, which is apparently quite high, gas barbecues are more economical to use than a regular barbecue, and they heat up in just a few minutes. Cleaning is not a big problem because they produce no ashes.

"As a general rule, one gas barbecue model is as good as another," says Ms. Birch. "The price difference is usually due to the difference in their size and whether or not they have luxury features. Dual controls are a luxury feature, which is useful for people who entertain a lot. With these controls, they can use only half the barbecue when they are alone. Another luxury feature is a rotisserie. Rotisserie motors on almost all gas barbecues are designed for a load of not more than 12 pounds. If a roast or a turkey weighs more than this, the rotisserie motor will not turn properly and will eventually burn out.

The type of grill on a gas barbecue is important. Ms. Birch recommends porcelain enamelled flat bars rather than the round chrome-wires. She says the fat runs off the chrome wires and drips onto the coals, causing them to flare up more often than is the case with the flat-type grill (most Hibachi barbecues have a flat grill).

The drip pan beneath the grill is another thing to check when buying a gas barbecue. Make sure it is securely fastened to the barbecue frame so that a sudden gust of wind will not tip the hot fat out.

Most gas barbecues can operate on either natural gas or propane. They have two orifices (jets), one for each type of fuel. Ms. Birch says it is important to match the fuel to the correct orifice, otherwise the barbecue is likely to "overfire" and burn poorly. She also advises anyone planning to use propane to buy a barbecue model that will house a propane bottle underneath it.

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June 20, 1977

FOR IMMEDIATE RELEASE

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June 20, 1977

FOR IMMEDIATE RELEASE

MOORE'S COMMENTS ON SOVIET TOUR

If Canadian grain farmers are to enjoy the benefits of long-term grain sale agreements with the Soviet Union, federal ministers will have to spearhead future negotiations.

This statement was made by Alberta's minister of agriculture, Marvin Moore, at a recent press conference on the Alberta government's fact-finding mission to the USSR. He explained that, "It is no longer good enough to give full responsibility to the Canadian Wheat Board for the sale of grain to the Soviets."

Mr. Moore's comments dealt with the impressions he had gained from the week-long tour of the Soviet Union and from his talks with several high-ranking Soviet officials, including Soviet Premier Alexei Kosygin.

At the end of the tour Mr. Moore said, "It's our opinion that Alberta and Canadian farmers should not depend on continued large grain sales to the Soviet Union." Mr. Moore followed that statement by reaffirming the need to support Canadian grain producers by developing confirmed, long-term markets for grain carryover stocks.

The impressions gained by Mr. Moore and the Alberta mission would appear to place the federal government in the spot of having to establish a more active sales campaign for Canadian wheat. In particular, Mr. Moore referred to the recent USSR-United States long-term grain sale agreement which will see American grain farmers get first chance at USSR grain imports. The agreement stipulates the USSR will buy her first six to eight million tonnes of wheat from the U.S. each year until 1980.

"It's clear the Americans were much more agressive than we were in Canada," said Mr. Moore. But before Canada can follow the U.S. lead, there has to be more contact between senior Canadian and Soviet trade officials.

With regard to traditional provincial-federal guidelines in foreign relations, Mr. Moore said "We went as far as we could go in our contacts with the Soviet Union."

"It's now the task of those who were on the mission to convince our federal counterparts we need action in following up the newly established contacts," added the Alberta Agriculture Minister.

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Moore's Comments on Soviet Tour (cont'd)

Mr. Moore was surprised to learn the Soviets knew a great deal more about Canadian agriculture than Canadians know about Soviet agriculture, and he appeared to pinpoint this as an area which would need to be corrected.

He said Canada had to actively support imports of Soviet-made machinery to achieve a better trade balance between the two countries and to gain a better sales climate in the future. Mr. Moore also said, "The Ministry of Industry, Trade and Commerce in Canada and the Minister Responsible for the Canadian Wheat Board are going to have to develop much closer ties with their counterparts in the USSR."

He praised the Canadian Wheat Board for fulfilling its responsibility of handling short-term international grain sales. However, he emphasized the board was limited in its dealings with its Soviet counterpart, Exportkhleb. According to Mr. Moore, the Soviet agency, "does not have the responsibility for determining how much to purchase or what year to purchase it in."

The mission appeared to pinpoint certain weaknesses in Canadian foreign trade relationships. A lack of communication between high-level officials was constantly emphasized through the conference.

Mr. Moore concluded by saying, "We need more dialogue and more contact, particularly at the federal level."

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FOR IMMEDIATE RELEASE

ALBERTA SWINE INSEMINATION CENTRE

Construction has begun on Alberta Agriculture's new swine artificial insemination (AI) centre at Leduc, located three miles east of the Edmonton International Airport. If all goes according to schedule, AI service should be available by early 1978.

Administered by the pork industry branch, the centre will house 20 top quality boars, the majority of which are likely to come from Agriculture Canada's record of performance (ROP) testing stations at Leduc and Lacombe. AI complements the ROP program by making possible the much wider use of superior animals identified under that program.

To get the AI program on a solid footing, fresh semen will initially be provided to only a limited number of hog producers in the province. Also, before the service is launched, producers will be offered courses in the AI technique so that they can inseminate their own sows.

Experience in central Canada and Europe has indicated that conception rates from fresh semen compare favorably with those obtained from natural breeding, but conception rates obtained from frozen semen are still highly variable. This variability is apparently caused by the semen thawing practices now in use, and the difficulty experienced in inseminating hogs at the correct stage of estrus.

At the present time research is in progress to improve swine semen freezing and thawing techniques and heat detection practices. Once these problems have been solved, the door will be open for new genetic improvement opportunities in pigs.

Advantages envisaged from the use of fresh semen in a swine artificial insemination program include:

- Greater use of top quality boars from the ROP testing program which should help to improve the quality of Alberta pork for domestic and international markets

- (cont'd) -

Alberta Swine Insemination Centre (cont'd)

. The opportunity to introduce new genetic material into closed swine herds with minimal risk of disease from the sire

. Access to a greater variety of breeds for cross-breeding programs

. Wider selection and better planned mating systems in seedstock herds.

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FOR IMMEDIATE RELEASE

PLANT RECEIVES GRANT TO PROCESS NEW FEED SUPPLEMENT

A unique animal feed processing plant at Barrhead, 60 miles northwest of Edmonton, has received a grant of $252,613 under the Canada-Alberta Nutritive Processing Assistance Agreement.

The nutritive processing assistance agreement provides assistance to eligible food processing plants in rural Alberta communities. The grant is shared equally by the Department of Regional Economic Expansion and the Alberta government and is based on 16.9 per cent of the total approved capital costs of the facility. In this case, that cost is $1,494,750.

Known as Alta Lipids Canada Ltd., the new plant will produce an encapsulated -fat feed supplement for dairy and beef cattle. The supplement was developed by the Commonwealth Scientific and Industrial Research Organization, an agency of the Australian government, and required 10 years of intensive research. The Australian government has a patent on the process, while Alta Lipids Canada Ltd. has the exclusive licence in Canada.

Based on conventional feed ingredients, the production process involves encasing microscopic droplets of fat with a finely-ground protein to produce particles that cannot be broken down in the rumen, but which digest normally in the abomasum (fourth stomach).

When made with tallow (a saturated fat) and protein, the supplement increases the energy density of cattle rations. It is claimed to increase milk yield, butterfat content and meat production, while decreasing feed intake.

Although there are some pilot plants operating, Alta Lipids Canada Ltd. is the first commercial sized plant in the world to produce and market this encapsulated-fat feed supplement.

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FOR IMMEDIATE RELEASE

AGRICULTURE CENTER OPENS IN SOUTHERN ALBERTA

A federal-provincial ceremony at Agriculture Canada's research station at Lethbridge at 2 p.m. on June 29 will mark the opening of the Agricultural Center.

Eugene Whelan, minister of Agriculture with the federal government, and Marvin Moore, minister of agriculture with the provincial government, will declare the $22 million building officially open. They will be accompanied by Jack Horner, minister without portfolio, Dr. J. E. Andrews, director of Agriculture Canada's research stations and C.S. Clark, regional director of Alberta Agriculture's extension division.

The new building, which will be open for public inspection on June 30, has a floor area of 270,000 square feet. It replaces a complex of buildings that are no longer adequate to meet the needs of modern agriculture and is designed to enable federal and provincial staff to work together more efficiently on problems and projects of mutual concern and interest.

The building consists of three blocks connected by a central corridor. The north block houses more than 100 environmentally controlled plant growth chambers and 20 isolation rooms for small animals used by the federal scientists. The centre block consists of laboratories representing every discipline in Agriculture Canada. The south block houses the administration section, a communal library and Alberta Agriculture's offices. The provincial irrigation headquarters is located on the second floor of the west half of this block. On the first floor of the west half of the block are the district extension and district irrigation offices and the regional offices for the animal industry division, the dairy division, the extension division, the farm development division and the plant industry division. The Agricultural Development Corporation's regional office is also on this floor.

A conference area, with a seating capacity of 300, is located between the north and centre blocks of the new building.

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FOR IMMEDIATE RELEASE

WEED CONTROL IN NEWLY ESTABLISHED FORAGE STANDS

Successful establishment of a forage crop depends upon many things, not the least of which is good weed control.

Alberta Agriculture's district agriculturist at Stettler, Andy Birch, says there are two main ways of controlling weeds in a new forage stand. One is to cut the crop before the weeds go to seed, and the other is to use herbicides.

Mowing usually controls weeds well in grasses but is not always satisfactory for legumes. Apart from alfalfa and sweet clover, most legumes have their growing point close to or at ground level during their first year. This means they cannot be cut lower than about four inches above the ground if these growth points are to be left unharmed. A cutting level of four inches above the ground is fine for many annual weeds which have their growing points well above the ground, but it will not control weeds which have their growing points at ground level, or which develop flowers close to the ground after having been cut. Dandelions and grassy weeds are examples of weeds which have their growing points close to the ground, and barnyard grass and redwood pigweed are examples of those which develop flowers close to the ground after cutting.

Herbicides

When used on seedling legumes, herbicides should always be applied when the seedlings are in the one to three trifoliate leaf stage. This is the period when they are most resistant to herbicide injury. After the four trifoliate leaf stage, they are easily damaged. Grass seedlings, on the other hand, should be treated with a herbicide after the three leaf stage, but before the shot blade stage. Unlike legumes, grasses are most susceptible to injury during their early period of growth.

The following herbicides have been registered for controlling weeds in seedling legume stands: Embutox E; Tropotox Plus; Carbyne, Eptam 8E and Dowpon. MCPA, 2, 4-D, Banvel LH and Carbyne are recommended for controlling weeds in seedling grass stands.

Choice of herbicide will depend upon the type of legume or grass in the stand and their stage of growth. "This choice and the rate of application are usually dictated by the limitation set by the most sensitive legume or grass in the forage mixture," says Mr. Birch.

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FOR IMMEDIATE RELEASE

INTERNATION EGG COMMISSION CONFERENCE TO BE HELD IN ALBERTA

For the first time, the annual conference of the International Egg Commission (IEC) is to be held in Canada. The location is Calgary, Alberta, and the dates are July 4 to 7.

Federal agricultural minister, Eugene Whelan, will officially open the conference on July 5. The annual review, considered the highlight of the event, will take place on that day, with each of the 22 major egg producing countries in the world reporting on governmental attitudes and their imports and exports. There will be a question and answer period following each country's speaker.

Those attending the conference hope to get a first hand look at Canada's supply management marketing system. IEC secretary, Denis Wellstead of London, England, says egg producers are always looking for successful production systems on which to pattern their own, and that Canada's system is an example of one which appears to be working well.

IEC was formed 15 years ago to encourage a high standard in the marketing and quality of eggs, particularly in regard to international trade. The IEC works toward standardizing such areas as packing, quality and grading. It is also an excellent source of statistical information on egg production and marketing throughout the world.

This year's conference will be co-hosted by the Canadian Egg Marketing Agency and the Canadian Egg Producers Council with the co-operation of the federal and Alberta governments. The Alberta Egg Board will be the local host.

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AGRI PROM MEMBERSHIP CHANGES

A unique organization of Alberta's food industry and Alberta Agriculture, known as Agri Prom, has launched a new membership program for 1977-78.

Agri Prom is a non-profit organization that was formed four years ago by 20 members of the food industry and Alberta Agriculture to promote the sale and consumption of Alberta products.

This year members will pay only $350, instead of $1,500 as was the case last year, and the provincial government will again match membership fees. The $350 fee allows Agri Prom members to display their products at the Edmonton Klondike Day's Agricultural Show and at the Calgary Chinook Mall Show. It also entitles a member to use the promotional material, designed around this year's Agri Prom theme - "Better Buy Alberta". The logo will be incorporated in all promotional displays and television, radio and newspaper advertisements.

Optional television time and newspaper advertising space are also available this year. Beginning in September and running through to November, any member of Agri Prom can buy one week's advertising time on television and/or a week's advertising space in a newspaper. Agri Prom members can also go together to buy television time and/or newspaper space. In either case, the government will contribute 50 per cent of the advertising costs.

Agri Prom is also planning to hold two grocery retail trade nights for their members. They will take place in Edmonton and Calgary in August. They are designed to give Agri Prom members an opportunity to expose their products to provincial retailers.

For further information concerning Agri Prom contact the secretary-manager, Gordon Mock, at 439-1512, or this year's president, Don Potter, at 488-2281.

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June 20, 1977

FOR IMMEDIATE RELEASE

FINAL GRAIN TRANSPORTATION COST STUDY RESULTS

Survey results on grain transportation costs incurred by farmers in north-western Alberta and the Peace River region have now been released by Alberta Agriculture.

Release of this information marks the end of the Farm Truck Cost Study, undertaken by Alberta Agriculture's production economics branch and the Alberta Wheat Pool about a year and a half ago. Survey results have already been released on grain transportation costs in north-central, north-eastern, south-central and southern Alberta.

The study was initiated in an attempt to determine the costs incurred by Alberta farmers when transporting grain to country elevators and other primary collection points, so that they would have some idea of the additional costs they might expect if hauling distances increased as a result of changes in the transportation system.

To obtain this information, survey questionnaires were mailed to a random selection of farmers in the six regions of the province. Since the sample group in each region was relatively small, the survey results are regarded only as an indication of transportation costs. However, they are expected to prove useful as guidelines for future action.

North-western Alberta

In the north-western region, the survey showed 25 grain trucks carried 115,375 bushels of grain to country elevators and other sales outlets and provided 1,406,425 bushel-miles of service.

The average total grain transportation costs per farm truck were calculated to be $343 for the year 1974-75. Total fixed costs per farm truck were $96, or just under 28 per cent of total grain transportation costs.

Driving labor was the largest cost component, accounting for 24.6 per cent ($84.50) of total costs. It was followed by dead-haul labor, responsible for a little over 24 per cent ($83.01), and depreciation, responsible for just over 16 per cent ($55.62).

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Final Grain Transportation Cost Study Results (cont'd)

Variable costs such as lubrication, repairs, tires, batteries, maintenance, repair labor and fuel accounted for just over 23 per cent ($79.78) of the total grain transportation costs. Fixed costs such as interest on investment, insurance and license fees were responsible for about 12 per cent ($40.38) of total grain transportation costs.

Calculated unit costs were 7.44¢ per bushel, 0.61¢ per bushel-mile and 47.93¢ per grain-mile.

Peace River Region

In the Peace River region, the survey showed 37 grain trucks carried 217,190 bushels of grain to country elevators and other sales outlets and provided 3,339,398 bushel-miles of service.

The average total grain transportation costs per farm truck were $396 for the year 1974-75. Total fixed costs per farm truck were $137 or over 34 per cent of total grain transportation costs.

The major cost components were depreciation, accounting for just over 20 per cent ($80.77), and driving labor, responsible for just under 20 per cent ($77.99). These two items were followed by dead-haul labor (other hauling labor), responsible for about 14 per cent ($55.90).

Variable costs such as lubrication, repairs, tires, batteries, maintenance, repair labor and fuel accounted for over 31 per cent ($125.21) of total grain transportation costs. Fixed costs such as interest on investment, insurance, and license fees were responsible for just over 14 per cent ($56.55) of total grain transportation costs.

Calculated unit costs were 6.75¢ per bushel, 0.44¢ per bushel-mile, and 50.18¢ per grain-mile.

A computer analysis of the individual responses received from the six regions has been completed, and the individual responses are now being analyzed together to obtain results on a provincial basis. They will be included in the final report to be published this summer.

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Final Grain Transportation Cost Study Results (cont'd)

Further information on the Farm Truck Cost Study can be obtained from:

G. Nabi Chaudhary,
Agricultural Transportation Economist,
Production Economics Branch
9718 - 107 Street,
Edmonton, Alberta T5K 2C8
(Telephone 427-5395)

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June 20, 1977

FOR IMMEDIATE RELEASE

DEADLINE FOR FEDERAL COW-CALF PROGRAM PARTICIPATION

Cattle producers in Alberta must submit an application form before June 30 if they want to take advantages of the benefits offered by the 1977 federal Cow-Calf Stabilization Program.

Designed to support calf prices at 90 per cent of the national average price over the last five years, and indexed to cash production cost increases, the program applies to 70 per cent of the calf crop from a maximum of 95 eligible cows. An eligible cow is a cow or heifer that was on the farm on April 1, 1977 and which was bred to calve this year.

To participate in the program, a cattleman must have more than five eligible cows because the first five are deductible from the total of eligible animals. For example, a cattleman may register a maximum of 100 eligible cows, but after the first five have been deducted, he has in actual fact 95 to which the 70 per cent of the calf crop applies.

Payment under the program is based on an average calf weight of 450 pounds. It is calculated by multiplying 70 per cent of the eligible cows by 450. This figure will then be multiplied by the average calf price per pound next fall. If the average price is less than 90 per cent of the last five-year average (indexed for inflation), the federal government will make up the difference. If it happened to be 5¢ per pound less than the five-year average, the most any beef producer would receive would be $1,496.25.

Most Alberta cattlemen who received benefits under the 1976 provincial assistance program will have already received an application by mail for the federal program. Those who did not participate in the provincial program are still eligible to participate in the federal program, which has no income limitations. Application forms can be obtained from district agriculturists.

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June 20, 1977

FOR IMMEDIATE RELEASE

INTERNATIONAL MARKETING APPOINTMENTS

H. B. McEwan, assistant deputy minister of Alberta Agriculture's international marketing division, has announced the appointments of two senior staff members. They are William Robertson, international trade director for the Pacific Rim and Louis Normand, senior financial officer.

Mr. Robertson

Mr. Robertson commenced work with Alberta Agriculture on May 1, 1977. As International trade director for the Pacific Rim, Mr. Robertson assists Alberta's agricultural commodity, processed food and feed product suppliers with their exports to Japan and south-east Asia.

He was born and raised in Alberta and has degrees in economics and commerce from the University of Alberta. He worked for Texaco Canada and for Steele Robertson before joining the federal department of Industry, Trade and Commerce in 1967. From 1972-1975 Mr. Robertson was trade commissioner (agriculture) in Japan. He then became chief of the agricultural products division of Industry, Trade and Commerce in Ottawa.

Mr. Normand

Mr. Normand is responsible for administering grants, loans and other financial programs available from international marketing. He also supervises the administrative and accounting services of the group.

He was born in Saskatchewan and has a B. A. from Manitoba and an M. B. A. from the University of Western Ontario. He is bilingual and has taught both English and French.

Since 1972 Mr. Normand has worked for Industrial Acceptance Corporation Limited, most recently as assistant to the general manager of inventory financing.

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June 20, 1977

FOR IMMEDIATE RELEASE

AGRICULTURAL DEVELOPMENT CORPORATION HIRES LOANS OFFICERS

Lorne C. Ordze, chairman of the Agricultural Development Corporation's (ADC) board of directors, has announced the hiring of Murray G. Woods, Ernest M. Good, Daryl J. Forbes and Dennis H. Cote as loans officers with the corporation.

Their main responsibility will be to advise farmers on the sources of financing available to them,and the financial structure most appropriate for their particular operation. In addition, they will act in a liaison capacity with lenders and local organizations to assist in the interpretation of ADC programs. Any applications for assistance from ADC will be analyzed by the loans officer and forwarded to the Camrose head office for disposition.

Mr. Woods

Mr. Woods, loans officer at Westlock, was born and raised in Oyen. He began his university degree at the University of Calgary where he was enrolled in the faculty of arts and science, majoring in biology. He went on to complete his B. Sc. (agriculture) at the University of Saskatchewan in April, 1977.

Mr. Good

Mr. Good, loans officer at Red Deer, was born and raised in Didsbury. He completed his B. Sc. (agriculture), majoring in economics at the University of Alberta. During this time he spent his summers doing general farm labor, and raising pure-bred cattle and Arabian horses.

Mr. Forbes

Mr. Forbes, loans officer at Athabasca,was born and raised in Westlock. He continued to gain agricultural experience while attending the University of Alberta by working on a part-time basis as a farm laborer on a mixed farm and also as a part-time technician at Pembina Forage Association. Here he tested forage samples to determine yields per acre. His previous summer was spent in Calgary where he was employed as an assistant district agriculturist. He completed his B. Sc. (agriculture), majoring in economics at the University of Alberta in April, 1977.

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ADC Hires Loans Officers (cont'd)

Mr. Cote

Mr. Cote, loans officer at Falher, was born and raised in Carman, Manitoba. During his enrollment at the University of Manitoba, he spent his summer months as an economic researcher for the planning secretariat of cabinet in Manitoba. He conducted economic research on the feasibility of irrigation in Manitoba, and carried out a study of on-farm and off-farm income in his area. Mr. Cote completed his B. Sc. (agriculture) at the University of Manitoba in April, 1977.

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June 20, 1977

FOR IMMEDIATE RELEASE

DISTRICT HOME ECONOMIST APPOINTMENTS

Vera Macdonald, head of Alberta Agriculture's home economics branch, has announced the appointments of the following new staff. They will be in training with a senior district home economist at the offices listed below.

Kathleen Veale of Moose Jaw, Saskatchewan, is in training at the Cardston extension office.

Maureen McNutt of Winnipeg, Manitoba, is in training at the Lethbridge office.

Brenda Powell of Souris, Manitoba, is in training at the Strathmore office.

Gladys Balog from the Milk River area of southern Alberta is in training at Camrose.

Janice Warren from southern Alberta is in training at Stettler.

Charlene Leeson of Ridgetown, Ontario, is in training at Red Deer.

Colleen Pierce from near Thorhild, Alberta, is in training at Vegreville.

Ruth Jameson from Duncan, Vancouver Island, British Columbia,is in training at Leduc.

Laura Kirchner of Lethbridge, Alberta, is in training at Morinville.

Karen Hoover of Delia, Alberta, is in training at Peace River.

Pat Carter from Selkirk, Manitoba, is in training at Fairview.

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AGRI-NEWS

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CANADA

June 27, 1977

FOR IMMEDIATE RELEASE

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June 27, 1977

FOR IMMEDIATE RELEASE

ALBERTA'S FARMERS MARKETS

The farmers market sign that is becoming a common sight on Alberta highways. It means there is a farmer's market in the nearby community.

Have you seen a highway sign depicting a farm girl with a hoe? Have you wondered what it means? It means there is a farmers' market in the vicinity.

Alberta Transportation has installed these signs along provincial highways to help motorists find the farmers markets that are located throughout the province. The sign was adapted from Alberta Agriculture's farmers' market program insignia.

This program was initiated in 1974 to boost the province's $1.5 million a year market garden industry, and to encourage the development of farmers' markets. The latter provide a direct link between vegetable and small fruit growers and the consumer.

The chairman of Alberta Agriculture's Farmers' Market Committee, Dan Ness, reports the province now has 50 farmers' markets compared with only four in 1973. Six of these 50 markets are new this year. They are located at Fort Edmonton (Edmonton) Seba Beach, Evansburg, Okotoks, Crossfield and Hardisty.

- (cont'd) -

Alberta's Farmers Markets (cont'd)

According to Mr. Ness, vegetables are the largest selling commodity at farmers' markets. However, fresh produce, which includes poultry products, is often complemented by home-baked products and non-food items like house plants, flowers and craft items. Craft demonstrations are sometimes held on market days.

Basically unstructured, Alberta Agriculture's farmers' market program provides encouragement and financial assistance to local market organizers. It gives grants of up to $5,000 for developing the physical facilities and to help with organizational and promotion costs.

For a market to be eligible for a grant, all the stall holders should grow their own produce and sell only high quality products. They must also observe all health regulations and conduct honest business operations.

To help Albertans and those visiting the province take advantage of the variety of top quality products available from farmers' markets, Alberta Agriculture has published a pamphlet entitled "Farmers' Markets". It contains a map showing the locations of the farmers markets, and the days and times that the various markets are open. "Farmers Markets" can be obtained from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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June 27, 1977

FOR IMMEDIATE RELEASE

GOVERNMENT FUNDING TO SPCA CONTINUES

"The Alberta Society for the Prevention of Cruelty to Animals (SPCA) will be able to continue its excellent work," says Agriculture Minister, Marvin Moore, in announcing the continuation of funds from Alberta Agriculture.

The SPCA has received operating funds from Alberta Agriculture for several years to complement such revenue sources as donations and memberships. The society uses these funds to manage an animal care centre and to provide a variety of services for the welfare of animals. Last year, for example, the Alberta SPCA investigated 566 cases of animal cruelty, which lead to eight court cases, the seizure of 171 animals and continued observations in 218 cases.

The SPCA's expanded work load has warranted an increase in funds, with the result that the society will receive an operating grant of $120,000 for this fiscal year.

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FOR IMMEDIATE RELEASE

RAPESEED AND MUSTARD DISEASE RESEARCH*

by W. P. Skoropad and J. P. Tewari
Department of Plant Science, University of
Alberta, Edmonton, Alberta T6G 2E3

Several diseases incited by fungi result in severe losses to rapeseed and mustard crop yields and quality in Alberta.

A clue to the control of blackspot disease has been found through work on wax deposits on rapeseed plants. Using commercial cultivars such as LB 22A, Midas, Torch and Tower, it has been shown that a waxy coating renders the plant surface relatively non-wettable. This provides the plant with a physical type of resistance to parasites, such as the blackspot fungus, because the presence of water appears to be conducive to the dispersal and entry of this fungus into the plant. Cultivars of rapeseed such as Span and Torch, which have minimal amounts of waxy coating, are highly suceptible to the blackspot disease. Midas and Tower, on the other hand, have a fair amount of wax and are much less susceptible to this disease. Both greenhouse and field investigations indicate that the incorporation of this feature into breeding programs would provide both rapeseed and mustard crops with resistance to blackspot.

Another rapeseed disease known as grey stem (or ringspot) has not been considered to be of any significant economic importance in Alberta in the past because it comes late in the season when the plants are close to maturity. However, the grey stem fungus causes another disease earlier in the season called white leaf spot. A survey of different areas in central Alberta during 1974, 1975 and 1976 revealed white leaf spot in every field of Polish rapeseed. Estimates of the affected leaf area indicated that this is one of the major foliar diseases of rapeseed in central Alberta. Although white leaf spot disease has been known in Western Canada for quite some time, it is generally not mentioned in accounts of disease surveys published from Alberta. Reasons for this could be that:

(a) the disease has become common during recent years or (b) it has been confused in the past with blackspot from which it is very hard to tell apart in the field without microscopic examination. Resemblance of the symptoms of these two diseases in the field poses a

* Research projects mentioned in this report are financed by the Alberta Wheat Pool and the Alberta Agricultural Research Trust.

- (cont'd) -

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Rapeseed and Mustard Disease Research (cont'd)

diagnostic puzzle and emphasizes that disease identification on the extension level should not be based on symptoms alone.

The family Cruciferae, to which rapeseed and mustards belong, shows maximum development, both in types and numbers, in the temperate regions of the world. Consequently, wild crucifers constitute a significant part of the herbaceous flora of Alberta --- an area which extends from 49° to 60° latitude north. It is logical, therefore, to look for agronomic characteristics well suited to conditions in Alberta in these wild plants, which have not only survived the rigorous climate of this province, but have also diversified during the course of evolution and/or migration.

This holds good for the local disease problems as well. In other words, we have a population of native plants that have been naturally selected for our conditions, and which could possibly be used as reservoirs of useful genetic material. They would also form excellent model systems for studying the long-term effects of current disease problems on rapeseed and mustard in Alberta. Hence, an investigation devoted to distribution, agronomic performance and disease aspects of the wild crucifers in Alberta is desirable. Such a study has not only a potential for the present rapeseed growing areas, but may also have significance for far northern areas where rapeseed growing is impossible at the moment.

Some wild crucifers common in and around the fields can also play host to fungi that affect rapeseed. Even some of the more specialized fungi use both cruciferous weeds and rapeseed as hosts. For example, the race of fungus that causes white-rust and staghead disease in rapeseed also affects stinkweed.

An effective research program in plant pathology should consider not only current disease problems, but also potential problems. It has been found that commercially grown cultivars of rapeseed are susceptible to a fungus called Myrothecium that is present in the environment in Alberta. The same fungus has plagued cultivated pansy in British Columbia and other plants, including some members of the rapeseed family, all over the world. Natural infection by

Rapeseed and Mustard Disease Research (cont'd)

this fungus has so far not been found in Alberta, but it has the potential for affecting rapeseed and mustards in this area.

(Results of some of the investigations mentioned above have been published as papers in Canadian Journal of Plant Science and Canadian Plant Disease Survey or as abstracts in Proceedings of the Annual Meetings of the Alberta Regional Group of the Canadian Phytopathological Society. A limited number of copies of these are available from the authors upon request.)

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FOR IMMEDIATE RELEASE

AGRICULTURAL REAL ESTATE VALUES IN ALBERTA

The average value of Alberta's agricultural real estate transfers last year was $177 per acre compared with $145 per acre in 1975 and $67 per acre in 1971.

This is one of the facts revealed in Alberta Agriculture's report on 1976 agricultural real estate values in the province. The report shows that almost 3 million acres of land, valued at about $525 million, changed hands in 1976 compared with just over 3.1 million acres, valued at almost $456 million, in 1975.

Last year's land transfer values evidentally increased rapidly until May when they declined. They improved again in September to their June-July level and remained at that level for the rest of the year. According to the report, agricultural land values in August 1976 were almost $7 per acre lower than they had been in August of the previous year.

The report also shows that the average transfer value of agricultural land in Alberta, and the number of acres sold, in 1976 peaked in April, when the average value reached $198 per acre, representing a 42 per cent increase over the 1975 level and almost double the average increase for the whole of 1976.

The author of the report says that future agricultural real estate values are difficult to predict because of the large number of variables that affect land values. These include such things as taxation policies, mortgage financing, inflation and so on. However, if land values continue to increase at the same rate as in the past two years, an average price of over $200 per acre can be expected for this year. It is also possible that some increase levelling-off, similar to that recorded in the last quarter of 1976, could be experienced, leaving the 1977 land value level at less than $200 per acre.

The report contains data on agricultural real estate transfer values and acres on a provincial, county, municipal district, improvement district and special areas basis. It also comments briefly on the total rural real estate situation, urban periphery land transfers, subdivided land values and soil capabilities in relation to the Canadian Land Inventory.

Copies of "1976 Agricultural Real Estate Values in Alberta", compiled by the resource economics branch of Alberta Agriculture, can be obtained from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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Alberta
AGRICULTURE

June 27, 1977

FOR IMMEDIATE RELEASE

DUTCH ELM DISEASE

So far the dreaded Dutch elm disease does not seem to have reached Alberta; but the native elm bark beetles, which spread it, are known to be in central Saskatchewan.

The fungus that causes Dutch elm disease appeared in Manitoba two years ago. The spores are spread from one tree to another by the elm bark beetles which bore into the small branches at the top of American and Siberian elm trees. The leaves of an infected tree turn yellow and then brown, but remain on the tree, which dies in a matter of weeks.

Since the female beetle lays her eggs between the bark and the wood of recently dead elms, the more recently dead branches and trees there are around, the higher the beetle population and the greater the chance of healthy trees being infected. Even elm wood that has been cut up for firewood is a potential hazard if it has bark to harbor the beetles.

Herman Oosterhuis, in charge of Alberta Agriculture's tree planting programs, urges those responsible for administering small urban centres to keep a watchful eye on their elm trees. Although regular pruning, recommended to keep the trees healthy, should be done only in the fall and winter, dead branches and dead trees can be removed at any time of the year. In fact, the sooner they are removed, the better. According to Mr. Oosterhuis, nobody really knows whether or not there are any native elm bark beetles in Alberta, but we cannot afford to take a chance.

He says he was horrified when he attended the recent annual meeting of the Western Canadian Society for Horticulture to see the damage the Dutch elm disease has done around Brandon, Manitoba. Although all the trees known to be diseased,or which looked unhealthy, were removed last year, many more were wilting and dying in June of this year. Those attending the meeting were told that thousands of native American elms along the Red River, north of Winnipeg, are also dying, despite the fact that 30,000 infected trees were removed last year at a cost of about $1 million. Many tree authorities expect the native elms in the unsettled regions of the Red River valley to be completely wiped out by the disease, and are now concentrating

- (cont'd) -

Dutch Elm Disease (cont'd)

their efforts on saving those in urban centres.

"We in Alberta are lucky," says Mr. Oosterhuis, "because we do not have extensive stands of native American elms to provide an endless supply of elm bark beetles and an enormous reservoir of infection. Without these, we have a much better chance of successfully coping with the Dutch elm disease if, and when, it arrives."

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FOR IMMEDIATE RELEASE

THE ALBERTA HAIL PROJECT

Can hail storms be modified to produce less crop damage? Do the benefits of hail suppression outweigh the costs? How can hail storms be seeded for maximum beneficial results? Does cloud seeding affect the rainfall?

Some answers to the above questions are starting to emerge from the Alberta Hail Project, but assessment of cloud seeding results are not easy. Alberta has been in the forefront of hail research and hail suppression for many years and is continuing its quest for answers to these and other questions.

The project is a five-year hail suppression and hail research experiment, which was started in 1974 to determine the practical and economical feasibility of present hail suppression technology. The project combines a large cloud seeding operation with an extensive research program.

This year cloud seeding began on June 20 and will continue until September 10. Hail storms will be seeded by seven aircraft equipped to seed from the top and base of the clouds. The storms will be seeded with silver iodide as early in their life cycle and as heavily as possible so that the hailstone embryos produced by the silver iodide smoke will compete with the natural hailstone embryos for the water in the storms. This procedure increases the number of hailstones but reduces their size.

To succeed in their endeavour, those incharge of the hail suppression program rely on, and greatly appreciate, the continued co-operation of the farming communities which supply rainfall, hailfall and crop damage data.

The Alberta Hail Project is sponsored by Alberta Agriculture through the Alberta Weather Modification Board and the Alberta Research Council.

Anyone interested in hail suppression techniques is invited to visit the operations centre at the Red Deer Industrial Airport. However, those bringing a party of five or more are asked to contact the project manager before their visit. He is Jim Renick, Alberta Hail Project, P.O. Box 240, Mynarski Park, T0M 1N0 (Telephone 886-4431 or Zenith 06057).

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Alberta COMMUNIC

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FOR IMMEDIATE RELEASE

ALBERTA WOMEN'S WEEK

In today's world we have to adjust and adapt to changes in our family life style, our eating habits, our home and our community. World changes are almost too fast to keep pace with. How does one cope?

Alberta Women's Week, scheduled to take place at Olds College from July 11 to 14, will attempt to provide some of the answers. This year's theme is "Challenge for Change".

Arranged and sponsored by Alberta Agriculture's home economists, Alberta Women's Week is essentially an involvement week for rural and urban women and for young and not-so-young women. It will include lectures, demonstrations and workshops as well as relaxation and recreation periods. It is a time to renew acquaintanceships, to make new friends, to exchange ideas and to learn new things. Stress and change, nutrition and fitness, leisure as a life style, and third-world concerns are only a few of the many topics on the agenda. Oil painting, voice and speech, crewel, self development and horticulture are also being offered this year.

Alberta Women's Week is a live-in program with room and meals supplied by the college for a nominal fee. Individuals and club groups may attend on a daily basis, and day care will be arranged for mothers with children under 11 years old.

Application forms for Alberta Women's Week can be obtained from any district home economist. The cost, excluding board and room, is only $1 per person per day or $4 per person per week.

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June 27, 1977

FOR IMMEDIATE RELEASE

CONSIDER SOIL BEFORE EXPANDING IRRIGATION

Farmers who are planning to develop additional land for irrigation should check the soil first to make sure that it is suitable, and those planning to purchase land, either privately or through a real estate agent, should check out claims that the land is irrigable before purchasing it.

This advice comes from D. A. Roll, Alberta Agriculture's irrigation specialist at Brooks, who reports there have been cases in the past year when dryland has changed ownership on the understanding that it was irrigable. However, the new owners later found that the soil was either marginal or not suitable for irrigation, even though the water supply was adequate and it was physically possible to install centre pivot systems.

"In at least one case," says Mr. Roll, "dryland with marginally irrigable soil was bought with a water agreement which allowed the purchaser to pump water onto the land. This is fine for the short-term land speculator who buys the land at a reasonable price, installs a few centre pivot systems, farms it for a year or so and then sells it at a profit as an irrigation farm unit. However, the long-term effect of blindly applying water to marginal soils may be to reduce or even ruin their productivity. If this occurs the land is of little agricultural value."

Mr. Roll adds that marginal soils are often solonetzic and should be thoroughly investigated by qualified soils people before they are considered for farming, let alone irrigation farming. Since irrigation is a long-term investment, it is only sensible to make sure the soil is productive before investing thousands of dollars in irrigation equipment.

Information on the irrigation capability of soils can be obtained from any of Alberta Agriculture's irrigation specialist offices.

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FOR IMMEDIATE RELEASE

SHEEP TEST SALE

Eighty-five top performing rams and ewes will be sold by public auction at the third annual Alberta Sheep Test Station Sale. It will be held at the Hereford Centre, Innisfail, at 1:30 p.m. on July 30.

Following are the breeds that will be sold.

Suffolk ..... 50 rams ..... 12 ewes

Hampshire ..... 13 rams ..... 5 ewes

Cheviots ..... 5 rams

These animals were consigned by the top sheep breeders in Alberta, and some gained over a pound a day. The officially recognized record of performance station test was held earlier this year in Calgary when the sheep were measured for rate of body weight gain and feed conversion. Performance indices for each animal have been calculated for easy comparison.

Station test information and sales catelogues are available from the following offices:

Alberta Agriculture
502 - 620 - 7th Avenue S.W.
Calgary, Alberta
T2P 0Y8
Phone: 403 - 261-6351

Alberta Agriculture
9718 - 107 Street
Edmonton, Alberta
T5K 2C8
Phone: 403 - 427-5077

Sheep dog trials and handicraft and agribusiness displays will complement the events of this year's sale. Lunch will be available at the centre.

Further information can be obtained from H.D. Scheer, sheep specialist, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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June 27, 1977

FOR IMMEDIATE RELEASE

BRETON PLOTS FIELD DAY

"Soil and Fertilizer Nitrogen" is the theme of this year's Breton Plots Field Day, scheduled for Friday, July 8. Breton is located on the grey wooded soils about 70 miles south-west of Edmonton.

The agenda of the field day, which is sponsored jointly by the University of Alberta's department of soil science and Alberta Agriculture, will include an outline of the characteristics, advantages and disadvantages of nitrogen fertilizers available in Alberta and other sources of nitrogen (manure, legumes, etc.). Results of current studies on time of nitrogen fertilizer applications for annual crops will also be presented.

A tour of the plots, some of which go back to 1930, is also planned for July 8. If the weather is bad, the tour will be replaced by a film entitled "Making the Most of a Miracle" and a resume of the Breton plot research findings.

A light lunch, courtesy of the Breton Anglican church women, will be available at the plot site.

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June 27, 1977

FOR IMMEDIATE RELEASE

HORTICULTURAL LIAISON OFFICER APPOINTED

P. D. McCalla, head of Alberta Agriculture's horticultural branch, has announced the appointment of Chris Campbell to the position of horticultural liaison officer.

Ms. Campbell's duties include working with horticultural societies on information programs and garden shows. She is also responsible for preparing radio and television programs on horticultural topics.

She was born and raised in Vancouver, British Columbia, and graduated with honors with a B. Sc. (agriculture) from the University of British Columbia in 1975. She then attended the University of Alberta and will receive an M. Sc. in horticultural physiology later this year.

Scholarships won by Ms. Campbell include the National Research Council of Canada Post-graduate Scholarship; the C. A. and J. Banks Foundation Scholarship; the D. F. Johnson Bursary; the B. C. Council of Garden Clubs Horticultural Scholarship and the B. C. Provincial Scholarship in 1971, 1973 and 1974.

Her summer jobs while attending university included landscape maintenance strawberry flavor research, involvement in the British Columbia virus-free potato seed program and horticultural extension work with the British Columbia Department of Agriculture. Prior to her present appointment, Ms. Campbell was conducting public tours of the tropical display house for the University of Alberta.

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July 4, 1977

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July 4, 1977

FOR IMMEDIATE RELEASE

AGRICULTURAL RESEARCH DIRECTOR APPOINTED

Alberta's agricultural minister, Marvin Moore, has announced the appointment of Dr. John Wiebe to the position of director of the Alberta Agricultural Research Center at Brooks. His appointment becomes effective August 1.

As director of the center, Dr. Wiebe will be responsible for administering the center, which will involve initiating research in consultation with farmers, industry and other government departments. He will also recommend improved horticultural and forage production procedures, based on scientific research findings, and work closely with other research groups.

Dr. John Wiebe, new director of the Alberta Horticultural Research Center at Brooks.

Prior to his present appointment, Dr. Wiebe was engaged in applied horticultural research at the Horticultural Research Institute of Ontario. He was also responsible for an advisory service for extension workers, farmers and industry personnel as well as being involved in, or acted as co-ordinator for, a number of special research projects. The most recent of these was with a grape research team, which consisted of research officers from the Ontario and federal governments, representatives from industry and growers.

Dr. Wiebe was born at Colonsay, Saskatchewan. He took his elementary and part of his secondary schooling in Saskatchewan and completed his secondary education in Ontario. He obtained his B.S.A.,with a major in horticulture, from the Ontario Agricultural College in 1951. In 1953 he graduated with an M.Sc. in horticulture, having specialized in vegetable crops, from Cornell University, U.S.A. Two years later he graduated with a Ph.D. in horticulture from the same university. He again specialized in vegetable crops, with particular emphasis on plant breeding, plant physiology and soils.

- (cont'd) -

Agricultural Research Director Appointed (cont'd)

Dr. Wiebe joined the Horticultural Research Institute of Ontario in 1955. Apart from a two year leave of absence for an assignment with the Food and Agricultural Organization in Egypt (1967-1969), he has remained at the institute as a research scientist until his present appointment.

Dr. Wiebe is a member of the Ontario Institute of Agrologists, the Agricultural Institute of Canada, the Canadian Society for Horticultural Science and the American Society for Horticultural Science.

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July 4, 1977

FOR IMMEDIATE RELEASE

IRRIGATION GRANT ANNOUNCED

Marvin Moore, Alberta's minister of agriculture, has announced that a grant in the amount of $8,771 has been made to the Ross Creek Irrigation District from the Alberta Heritage Savings Trust Fund.

The grant is part of the $200 million appropriation which has been made available for the upgrading of irrigation in southern Alberta. Over the next few years Alberta Agriculture plans to spend more than $90 million from the Heritage Savings Trust Fund for upgrading and expanding irrigation facilities. The irrigation districts are to direct these monies towards upgrading existing facilities, expanding irrigation within the district and expanding irrigation to new districts.

The minister indicated he hopes the Ross Creek irrigation district will recognize the importance of expanding irrigation and of offering water services to new producers.

Anyone who would like to become involved in irrigation farming is urged to contact his nearest irrigation district or Alberta Agriculture's irrigation division in Lethbridge.

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Alberta
AGRICULTURE
COMMUNICATIONS

July 4, 1977

FOR IMMEDIATE RELEASE

HEATING LOWERS THE FEEDING VALUE OF SILAGE

Many people still think that a certain amount of heating is necessary for the production of good silage, but this is definitely not so. Research has shown that heating lowers the feeding value of silage.

Silage produces heat when the carbohydrates are oxidized by entrapped air or by air getting into the silo. When this happens the carbohydrates form carbon dioxide and water instead of being converted into lactic acid, a desirable constituent of silage. The heat formed during oxidation cause the remaining carbohydrates to react with certain groups of proteins in the feed which are then rendered completely indigestible. The proportion of proteins which are affected depends upon a number of factors, but temperature is by far the most important.

Research carried out in the U.S. has shown that weight gains of cattle decrease when silage has less than optimal protein digestibility, even though the animals do not reduce their consumption. In fact, cattle find heated silage just as palatable as good quality silage.

Protein digestibility of silage can range all the way from 0 to 80 per cent, depending upon the amount of heating the silage has undergone. A digestibility value of 70 per cent or greater is considered optimal. Values of less than 60 per cent indicate severe heat damage, while those between 60 and 70 per cent indicate the silage has less than optimal feeding value. Unfortunately, normal laboratory protein analysis tests do not show protein digestibility damage.

Heat damage can be avoided by carefully excluding the air from the silage as it is put in place, and sealing the silo so that no air can enter. Upright tower silos, especially the sealed, gastight models, are easier to pack and seal than horizontal silos. However, research in Ireland has shown that horizontal silos that are carefully packed and carefully sealed will produce almost as high quality silage as gastight tower silos. In either case, special care must be taken when ensiling low moisture and long-cut forage, because it is difficult to pack and seal.

- (cont'd) -

Heating Lowers the Feeding Value of Silage (cont'd)

The ideal moisture content for forage that is going to be ensiled is 60 to 65 per cent. A rough estimate of the moisture content can be made by forming the material into a ball between the hands and holding it there for about half a minute. If the ball keeps its shape when released and the hands are dry, the moisture content is between 60 and 70 per cent. If the hands are wet when the ball is released, the moisture content is higher than 75 per cent. If the ball breaks apart when released, the moisture content is below 60 per cent.

The optimum temperature of silage during the ensiling process is 25° C. If the temperature goes above 43°C. during this period, the protein digestibility will be considerably reduced. Hence, it is important to check the temperature continually while filling a horizontal silo. A good way to do this is to make a hole in the material with an iron bar and then to lower a thermometer on a string to a depth of about three feet.

There is nothing that can be done to stop heating once a silo has been filled, but the following practices can be used to prevent heating and to counteract heating while the silo is being filled.

- Make sure the knives on the forage harvester are sharp so that they do not shred the material. Shredded forage makes fluffy silage which entraps air.
- Fill the silo as quickly as possible.
- Reduce the wilting time.
- Cut the forage more finely if it is too dry to pack properly.

More detailed information on all aspects of silage making is contained in an Agri-fax publication entitled "Silage in Alberta". Among many other things, it tells the best time to harvest silage material, how to pack it and how to cover it to keep nutrient losses to a minimum. "Silage in Alberta" can be obtained from district agriculturists' offices and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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July 4, 1977

FOR IMMEDIATE RELEASE

HAY HARVESTING AND STORAGE LOSSES

Even when hay has been cut at the optimum stage of maturity (early bloom) considerable nutritive losses can occur during the harvesting and storage processes.

There are three ways in which the feed value of hay can be lost between the time it is cut and baled or stacked. These are through respiration, mechanical losses and leaching losses.

Respiration

Since the life process in grass and legume plants, like cut flowers, persists as long as there is enough moisture in the cells to support life, it uses up some of the food which was produced by the plant before it was cut. These respiration losses continue until the hay dries to a moisture content of about 25 per cent, below which point the life process stops and no more respiration losses occur.

Ross Gould of Alberta Agriculture reports that recent research suggests a freshly cut crop of hay can lose from 7 to 11 per cent of its original dry matter through respiration between the time it is cut and dried. The longer the drying period, the longer will be the respiration loss. Hence, quick drying is important for reducing these losses.

Mechanical Losses

The drier the cut hay becomes the greater the percentage of leaves and stems that tend to break off and shatter into pieces which are too small to be picked up by haying equipment. Research studies have shown, for example, that shattering losses vary from 3.6 to 20.4 per cent, depending upon the moisture content of the hay.

Mr. Gould says, "Losses can be kept below 10 per cent if the hay is raked or turned while its moisture content is above 35 per cent." During research studies the heaviest losses occurred when the leaves dried rapidly on a hot day while the stems were still damp. Hence conditioning, which speeds up the drying of stems can be expected to result in lower mechanical losses. Shattering losses were also found to be lower when the hay was raked in early morning or late afternoon because of the higher humidity.

- (cont'd) -

Hay Harvesting and Storage Losses (cont'd)

"The highest losses occurred," Mr. Gould says, "during the baling operation at the pickup. Normally these losses varied from one to 3 per cent of the total crop. Bale chamber losses were generally below one per cent."

Field chopper losses were similar to baler losses at the pickup. However, additional losses of one to 3 per cent were found to occur at the blower, especially if the wagon or stacker was not properly covered.

Leaching Losses

Leaching is another cause of loss which is often not recognized. Some of the sugars and protein constituents are in a soluble form which can be washed out by rain. One experiment suggested that about a 1.4 per cent loss would result from each 10 mm of rain which would be the same as a 3.5 per cent loss from each inch of rain on cut hay. It was also found that leaching losses are slightly higher in conditioned hay where the stems have been broken and the plant juices exposed.

Storage Losses

Respiration

Hay dried to about 25 per cent moisture can continue to respire very slowly in storage. Research in Beltsville, Maryland, has shown that well dried, field cured hay can be expected to lose about 3 to 4 per cent of its total potential dry matter in storage because of continued respiration. Losses would be higher in hay that was stored while tough or damp.

Heating

When hay is packed tightly in a bale or stack, the heat produced from the respiration process is trapped and builds up to quite high levels. In addition to the losses from respiration, the digestibility of the hay can be damaged. At a temperature of over 40 ^{o}C, for example, a complex reaction occurs between the protein and sugars in the plant material. This reaction makes both less digestible. Sometimes called the 'browning reaction', it can be recognized by the brown color and tobacco odor of the heated hay.

Dry matter losses in hay harvested at 30 per cent moisture have been found to be about 10 per cent. In hay with a 50 per cent moisture content, these losses went as high as 20 per cent.

- (cont'd) -

Hay Harvesting and Storage Losses (cont'd)

The digestibility of the dry matter was reduced by 6 per cent in 35 per cent moisture hay. Hay wet to 53 per cent moisture showed a reduction in digestibility of 14 per cent. According to Mr. Gould these losses in digestibility were reflected in much lower rates of gain.

When all the above losses are added together it is clear that a very substantial proportion of a hay crop can be lost, even under good weather condition, between the time it is harvested and the time it is fed.

July 4, 1977

FOR IMMEDIATE RELEASE

UNOFFICIAL WORLD RECORD SET AT PORK CONGRESS

An unofficial world record was set at Alberta's annual Pork Congress in Red Deer when Gainers Ltd of Edmonton paid $4,600 for the first prize hog carcass.

The successful bidder was John McComish of Gainers Ltd (Edmonton) who outbid his opponent, Donald Cummings of Swift Canadian, when he offered $26.29 a pound for the 175-pound Yorkshire carcass. As far as can be determined from the Guiness Book of World Records, this price is a world record for a hog carcass.

Gainers Ltd, Swift Canadian, Canada Packers, Burns Meats Ltd and Intercontinental Packers purchased the 10 top barrows in the sale for an average price of $1,800.

A landrace boar, contributed by Ernie Hull of Balcarres, Saskatchewan, took the top price of $1,250 in the breeding stock sale. The boar went to Don Duff of Fort Saskatchewan. Other prices ranged from $175 for open gilts to $900 for a number of the boars.

One highlight of the congress was a speech on the the need to find more equitable shares in the Crowsnest rates for both livestock producers and grain producers, given by Otto Lang, federal minister of transportation and guest speaker at the banquet.

Other highlights included speeches by Dr. E. J. Stevermer of Iowa State University, U.S.A.; Dr. E. Swierstra of Lethbridge and Dr. H. Fredeen of Lacombe. Dr. Stevermer discussed farrowing systems and production efficiency, while Dr. Swierstra spoke on the swine herd sire. Dr. Fredeen noted the genetic changes that have taken place over the years in Canadian swine.

The swine producer and industry displays that filled the large Kinex Building at the Red Deer exhibition grounds provided a wealth of information and interest for the more than 1,000 visitors who attended the congress.

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July 4, 1977

FOR IMMEDIATE RELEASE

POSSIBLE DIAMONDBACK MOTH INFESTATION

Farmers in central and eastern Alberta are urged to check their rape crops from now until they start to ripen for diamondback moths.

Hugh Philip, entomologist with Alberta Agriculture's plant industry laboratory, reports that abnormally large numbers of these insects have been seen by Agriculture Canada entomologists in rape crops around Saskatoon, and that there is a good chance they will find, or have found, their way into Alberta. These moths migrate to the Prairie provinces from the United States every year, but this year their numbers are much larger than usual, and their passage towards Alberta has been facilitated by a predominance of south-easterly winds.

Diamondback moths are about three-eighths of an inch long and a dull grey with a diamond pattern down their backs when their wings are folded. The larvae are pale green and approximately half an inch long when fully grown. A typical characteristic is their backward motion when disturbed, and they often suspend themselves from rape plants by a silk-like thread when dropping to the ground.

When the diamondback moth's eggs hatch on rape plants, the larvae burrow into the leaf and feed on the inner tissue, causing small discolored patches to appear. After a few days the larvae emerge and feed on the outer surface of the leaves creating small round holes. If the infestation is very heavy, the larvae will eventually eat all the leaf tissue, either severely retarding the development of the plant or killing it, depending upon its stage of growth.

Mr. Philip says an insecticide should be applied if rape leaves show severe damage and larvae are in evidence. Products that can be used include Guthion at a rate of 5 ounces active ingredient per acre; Malathion at 5 ounces active ingredient per acre and Dylox at 6 ounces active ingredient per acre. Mr. Philip asks rape growers whose crops are in bloom to try to spray early in the morning or late in the evening when bees are not foraging.

Since diamondback moths can produce three generations of young in a season, it is important that rapeseed growers check their crops every week until they start to ripen.

(cont'd)

Possible Diamondback Moth Infestation (cont'd)

Alberta Agriculture's entomologists are conducting a survey to find out whether the moths are actually in Alberta, and if so, the severity of the infestation and the size of potential infestation areas. The last large migration occurred in southern Alberta in 1975, but it arrived too late to create any damage. Because this year's flight could be earlier, the entomologists are keeping a watchful eye on the situation.

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July 4, 1977

FOR IMMEDIATE RELEASE

PLANT SCIENCE FIELD DAY

The University of Alberta's department of plant science will feature plot tours at Parkland University Farm and Ellerslie Farm at this year's field day, scheduled for July 20.

The field day will start at 10 a.m. at the Parkland University Farm (114 Street and 72 Avenue) with slide-illustrated presentations by Dr. W. H. Vanden Born, Dr. W. G. Corns and Dr. N. Colotelo. Their topics will be "Herbicide Fertilizer Interactions in Wild Oat Control", "The Potential for Herbicides in Reforestation" and "The Degrading Fungus --- Sclerotinia", respectively.

The plot tours will start at 1:00 p.m. and cover vegetables, ornamentals, forage crops, field crops and herbicide trials. The horticultural section will include vegetable and annual flower cultivar trials, woody ornamental hardiness trials and experiments with different turf grasses and management practices. There will also be a strawberry forcing experiment where the strawberry bed is covered with a temporary greenhouse type frame.

The forage plots will include a collection of all the forages grown in Alberta and the forage strains being selected for possible licensing. The feed wheat and rapeseed breeding plots are being evaluated for improved yields and early maturity, while the herbicide test plots show the results obtained from some comparitively new herbicides used to control wild oats in wheat and barley.

Enquiries about the field day should be sent to Dr. P. D. Walton, Chairman of the Department of Plant Science, Room 340, Agriculture Building, University of Alberta, Edmonton T6G 2E3 (Telephone 432-3239).

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July 4, 1977

FOR IMMEDIATE RELEASE

DISTRICT AGRICULTURIST APPOINTED TO PROVOST

John Calpas, director of Alberta Agriculture's extension division, has announced the appointment of Brian T. Laing to the position of district agriculturist at Provost.

Mr. Laing is a native of Cranbrook, B.C., and a 1974 graduate of the University of British Columbia where he specialized in animal science. After graduation, he joined Alberta Agriculture as an assistant district agriculturist at Provost. In 1975 he transferred to Three Hills as co-district agriculturist, and has remained there until his present appointment.

Mr. Laing is a sports enthusiast and has been very involved in coaching minor hockey both in Provost and Three Hills. He is also interested in raising and showing dogs, and was the main force behind the formation of a Dog Club in Provost.

Mr. Laing's transfer to Provost fills the vacancy created when the former district agriculturist, Ralph Berkan, moved to Edmonton as associate director of the extension division.

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COMING AGRICULTURAL EVENTS

1977

Alberta Institute of Agrologists
Provincial Conference
Red Deer Exhibition Grounds (Chalet)
Red Deer, Alberta ..... July 7 - 9

Canadian Galloway Association -
Annual Meeting
Hospitality Inn
Calgary, Alberta ..... July 11 & 12

Provincial Weed Tour
County No. 24 Vermilion River
Vermilion, Alberta ..... July 12 - 14

Canadian Seed Growers Association Annual Conference
Regina Inn
Regina, Saskatchewan ..... July 13 - 15

"The North American Lily Society" 30th Annual
International Lily Show
University of Saskatchewan
Saskatoon, Saskatchewan ..... July 14 - 17

Third International Farm Management Congress
Hamburg, West Germany ..... July 17 - 22

Klondike Days
Edmonton Exhibition Grounds
Edmonton, Alberta ..... July 20 - 30

Canadian Hereford Association National
Judging Clinic
Veterinary College, University of Saskatchewan
TraveLodge Motor Hotel
Saskatoon, Saskatchewan ..... July 24 - 26

Medicine Hat Exhibition & Stampede
Stampede Park
Medicine Hat, Alberta ..... July 25 - 30

Canadian Federation of Agriculture
Semi-Annual Meeting
New Brunswick ..... July 26 - 28

Thirteenth Annual Hort.-Week Program
Olds College
Olds, Alberta ..... August 1 - 6

- (cont'd) -

Coming Agricultural Events (cont'd)

Canadian Agricultural Extension Council
Winnipeg, Manitoba. . . . . August 8 - 11

National Appaloosa Horse Show
Stampede Park
Medicine Hat, Alberta . . . . . August 11 - 14

Alberta Polled Hereford Club-Annual Meeting
Alberta Hereford Centre
Innisfail, Alberta . . . . . August 13

Agricultural Institute of Canada -
Canadian Institute of Food Science & Technology
University of Guelph
Guelph, Ontario . . . . . August 14 - 18

Canada and World Food Symposium
Carleton University
Ottawa, Ontario . . . . . August 22 - 24

Canadian Conference for Nature Symposium
University of Regina Campus
Regina, Saskatchewan . . . . . August 22 - 27

Fifteenth Annual Field Day
Alberta Horticultural Research Center
Brooks, Alberta. . . . . August 26

Canadian Plowing Match
Agricultural Fair Grounds
Charlottetown, P.E.I. . . . . August 27

Canadian Fertilizer Institute 1977
Annual Convention
Banff Springs Hotel
Banff, Alberta . . . . . August 29 - 31

Feed Industry Conference
Convention Inn South
Edmonton, Alberta . . . . . September 22 & 23

American Society of Agricultural Engineers
Meeting - North Central Region
Ramada Inn
Winnipeg, Manitoba. . . . . September 30 - October 1

Canadian Poultry & Egg Processors Council Meeting
Bayshore Inn
Vancouver, B.C. . . . . October 17 & 18

Canadian Hatchery Federation Annual Convention
Bayshore Inn
Vancouver, B.C. . . . . October 19 - 21

Canada Grains Council Semi-Annual Meeting
Montreal, Quebec . . . . . October 25 & 26

- (cont'd) -

Coming Agricultural Events (cont'd)

Saskatchewan Swine Symposium
Sheraton-Cavalier Hotel
Saskatoon, Saskatchewan ..... November 1 - 3

United Grain Growers Ltd. - Annual Meeting
Edmonton, Alberta ..... November 2 & 3

Alberta Broiler Growers' Market Board
Annual Meeting
Four Seasons Hotel
Calgary, Alberta ..... November 2

Women of Unifarm Annual Convention
Macdonald Hotel
Edmonton, Alberta ..... November 2 & 3

Alberta Beekeepers Association Annual Convention
Carriage House Hotel
Calgary, Alberta ..... November 2 - 4

Northern Alberta Hereford Club
Annual Meeting
Millet, Alberta ..... November 5

Farmfair '77
Edmonton Exhibition Grounds
Edmonton, Alberta ..... November 8 - 18

Royal Agricultural Society of the Commonwealth -
Alberta Tour
Calgary & Edmonton, Alberta ..... November 21 - 25

Agricultural Fieldmans Inservice Training
Sandman Inn
Edmonton, Alberta ..... November 21 - 25

Banff Poultry Servicemen's Workshop
Banff Centre,
Banff, Alberta ..... November 28 - 30

Canada Weed Committee (Western Section)
Macdonald Hotel
Edmonton, Alberta ..... November 29 - December 1

The Royal Smithfield Show
Earls Court, London, England ..... December

Alberta Irrigation Projects Association
36th Annual Meeting
Park Plaza Motor Hotel
Lethbridge, Alberta ..... December

- (cont'd) -

Coming Agricultural Events (cont'd)

Alberta Cattle Commission Annual General Meeting
Westward Inn
Calgary, Alberta ..... December 7 & 8

American Society of Agricultural Engineers
Meeting "The Food-Energy Fix"
Palmer House, Chicago, Illinois, U.S.A. ..... December 13 - 16

1978

Unifarm Annual Convention
Macdonald Hotel
Edmonton, Alberta ..... January 9 - 13

Western Agricultural Conference
Regina, Saskatchewan ..... January 25 & 26

Alberta Rapeseed Growers' Association
Macdonald Hotel
Edmonton, Alberta ..... January 26 & 27

Alberta Dairymen's Association Annual Convention
Macdonald Hotel
Edmonton, Alberta ..... February 6 - 8

Agricultural Service Board Conference
South Convention Centre
South Edmonton, Alberta ..... February 7 - 9

Canadian Federation of Agriculture
Annual Meeting
Quebec City, P.Q. ..... February 13 - 16

Alberta Poultry Industry Conference (27th)
Westward Inn
Calgary, Alberta ..... February 21 & 22

Alberta Poultry Hatchery Association
Westward Inn
Calgary, Alberta ..... February 21

Alberta Commercial Egg Producers Association
Westward Inn
Calgary, Alberta ..... February 22

Alberta Turkey Association
Westward Inn
Calgary, Alberta ..... February 22

- (cont'd) -

Coming Agricultural Events (cont'd)

Alberta Hatching Egg Shippers Association
Westward Inn
Calgary, Alberta ..... February 22

Alberta Egg & Fowl Marketing Board Annual Meeting
Westward Inn
Calgary, Alberta ..... February 23

Alberta Turkey Growers' Marketing Board
Annual Meeting
Westward Inn
Calgary, Alberta ..... February 23

Alberta Branch Canadian Seed Growers
Association Annual Meeting
(Hotel to be announced)
Edmonton, Alberta ..... March 6 & 7

Canadian Western Stock Show & Rodeo
Edmonton Exhibition Grounds
Edmonton, Alberta ..... March 26 - April 2

4-H Canadian Council Meeting
Chateau Halifax
Halifax, Nova Scotia ..... May 29 - June 3

Fifth International Rapeseed Conference
Malmö, Sweden ..... June 12 - 16

Canadian Plowing Championship Match
Wanham, Alberta ..... June 14 - 17

International Soil Science Congress
University of Alberta
Edmonton, Alberta ..... June 19 - 27

Twenty-first Annual Meeting of the Canadian
Institute of Food Science & Technology
Edmonton Plaza Hotel
Edmonton, Alberta ..... June 25 - 28

Canadian Veterinary Medical Association
Annual Convention
Regina Inn
Regina, Saskatchewan ..... July 9 - 12

Alberta Polled Hereford Club Annual Meeting
Alberta Hereford Centre
Innisfail, Alberta ..... August 12

- (cont'd) -

Coming Agricultural Events (cont'd)

Second International Green Crop Dehydration
Congress - Dri-Crops'78
University of Saskatchewan
Saskatoon, Saskatchewan . . . . . August 20 - 25

The Royal Smithfield Show
Earls Court, London, England . . . . . December

1979

Seventeenth Tri-Annual Internation Conference
of Agricultural Economists
Banff Centre
Banff, Alberta . . . . . September 5 - 15

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FOR IMMEDIATE RELEASE

THIS WEEK

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July 11, 1977

FOR IMMEDIATE RELEASE

GOVERNMENT TAKES STAND ON METRIC CONVERSION OF LAND MEASUREMENT

Alberta Agriculture Minister, Marvin Moore, says the Alberta government is taking a major stand on the metric conversion of land measurement as a result of farmer representations from across the province.

The Alberta government has sent a letter to Hon. Jean Chretien, federal cabinet minister responsible for metric conversion, requesting that an amendment be made to the Metric Conversion Bill to facilitate retention of the acre as the unit of land measurement. "The retention of the acre," says Mr. Moore, "would significantly benefit the farming industry by providing farmers with a well-known reference point upon which to base cultivation calculations and would significantly minimize the disruption of other metric conversion factors on the farm. A change in land measurement would hopelessly confuse the already complicated metric conversion problem facing the agricultural industry."

Although Alberta farmers and farmers in the other provinces have strongly objected to the introduction of the "hectare", the federal government has refused to recognize their concern. The change to "hectare" would necessitate major changes in farm machinery calibration and, in the short-run, could be very costly. Also, as the provincial system of legal survey has already divided the province into sections and acres, an immediate conversion would be impossible.

"Hopefully the federal government will recognize the importance of retaining the existing land measurement system and will amend the legislation accordingly," concluded the minister.

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July 11, 1977

FOR IMMEDIATE RELEASE

SOME TAX TIPS FOR CATTLEMEN

What can a person do to avoid having to pay a lot of income tax when he reduces his beef herd?

Farmers and ranchers who were able to predict such a move, or who expected a significant improvement in cattle prices by this year, may have used the Livestock Inventory Provision (LIP) during past low income years to average out their overall income position when they found themselves once more in a high income position. Alberta Agriculture's taxation specialist, Len Fullen, says LIP allows a taxpayer to add some or all the market value of livestock on hand (cattle, sheep, swine and horses, excluding basic herd animals) to income when his income level is low, and then to deduct the same amount as an expense the following year.

If, for example, a person incurred a $15,000 loss in one year, he could bring in any amount of LIP up to the value of livestock on hand to cover part or all the loss and still pay little or no income tax. Then, the following year, when hopefully his income is higher, he would deduct the amount added during the previous year as an expense, thereby reducing his taxable income. This procedure can be continued from year to year to enable a livestock owner to adjust his income so that he is in the most favorable tax position in the long run.

A person who did not use LIP last year but who still intends to sell part or all of his cattle herd this year also has some things he can do to improve his taxable income position. One option would be to use up as much as possible of the operating or capital losses that have been carried forward from previous years.

Another option is block averaging. For those who qualify, five-year block averaging is a way of considerably reducing high income, especially in view of the low incomes cattlemen have been experiencing over the last few years. Even farmers who will not be eligible to block average for a couple more years, and who have to pay tax now on income derived from a cattle sale, will find it can be useful later on if they want to buy replacement breeding stock. "Too often farmers and ranchers use five-year block averaging at regular intervals instead of looking ahead and trying to determine when it will be most beneficial," Mr. Fullen says.

- (cont'd) -

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ome Tax Tips for Cattlemen (cont'd)

For those people who do not qualify for block averaging at this time, the federal taxation department will automatically apply general averaging if their current year's income is 10 per cent higher than it was during the previous year, and 20 per cent higher than it averaged over the past four years. General averaging is a considerable help to people whose income goes up each year. However, according to Mr. Fullen, it does not help to average out profit years and loss years, as is the case with block averaging.

A farmer who is getting completely out of all, or some part of, his livestock business (e.g. selling all his cattle or all his cows with the idea of running a feeder operation) may be able to use all or some of the income to purchase an income averaging annuity contract.

If breeding stock is being sold because of a shortage of grass, the owner might want to consider buying feeder cattle later in the same year to offset the income from the sale of breeding stock. Then, in another year when grass is more plentiful, he could sell off the feeder cattle and offset that income by the purchase of replacement breeding stock.

There is still one more thing that can be done to counteract a high income position if a cattleman is also a grain producer. He can hold off the income from grain sales until next year by deferring delivery or by obtaining a deferred cash purchase ticket from the elevator.

Further information on the above management strategies can be obtained from chartered accountants and regional farm economists.

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July 11, 1977

FOR IMMEDIATE RELEASE

ALBERTA FARMERS EXPERIENCE DIFFICULT PLANTING SEASON

by F. A. Boyce, Statistician,
Alberta Agriculture

The spring of 1977 was a very trying one for many Alberta farmers.

Precipitation during the winter months, including March and April, was well below normal, with the result that soil moisture levels were very low. Warm, dry days, combined with relatively strong winds, further reduced top soil moisture, and fears of drought and dust storms were expressed in many areas of southern and central Alberta. By the end of April, all areas were reporting moisture shortages except the Peace River region, which indicated near ideal conditions. Although seeding had started throughout the province, many farmers waited for additional rainfall to ensure a good weed kill, and a better germination rate for their crops.

Widespread and generous rains during May removed fears of a serious drought, but a few areas in the southern part of the province, particularly the southwest corner, did not receive enough moisture, and crops continued to suffer. Seeding in the southern and central regions progressed generally on schedule, and only a few areas reported significant seeding still to be completed on June 1.

In northern regions, field operations were delayed by above normal rainfall during May and were about a week to 10 days later than the central regions. By June 10, seeding had been generally completed, except in the western areas of the regions where heavy rains and localized flooding in the Barrhead, Sangudo, Evansburg, and Drayton Valley areas had delayed seeding long past the optimum. Hence, much of the cereal acreage will be used for greenfeed, and the summerfallow acreage in these areas has increased substantially. In the Sangudo-Evansburg area, the seeded acreage is estimated to be only about half of that originally intended.

The Peace River region also experienced a very difficult planting season. Persistent showers and wet fields delayed, and, in many instances, prevented farmers from achieving their initial planting intentions. The hardest hit areas were in the Fairview, Spirit River, Eaglesham, Falher, Valleyview and High Prairie districts. Acreages seeded in these areas range from 30 to 35 per cent of normal at High Prairie, 50 to 60 per cent at Fairview, Eaglesham and Valleyview

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Alberta Farmers Experience Difficult Planting Season (cont'd)

and 70 to 75 per cent at Spirit River and Falher. Crops in many low-lying fields were either not seeded or were drowned out by excessive rain. For the entire Peace River region, the actual crop acreage is not expected to exceed 70 to 75 per cent of the intended acreage. In addition, many rapeseed and barley crops were seeded very late. They will need excellent growing conditions and a long frost-free period to reach maturity.

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July 11, 1977

FOR IMMEDIATE RELEASE

PINK EYE IN CATTLE

Pink eye, the common name for an infectious eye disease in cattle of all ages, can occur at any time of the year, but is most prevalent in the summer when flies and dust aid in its transmission.

Dr. Frank Baker, Alberta Agriculture's beef cattle extension veterinarian, says the discomfort and debilitating effect of pink eye undoubtedly results in considerable loss of milk and meat production in an infected herd.

Occuring in most countries of the world, this disease is caused by a bacterium (Moraxella bovis). Dr. Baker says it is very important to isolate affected animals in the early stages of an outbreak because of the contageous nature of the disease. Early signs include watering of the infected eyes and inflamed eyelids and "whites" of the eyes, hence the term pink eye. Pink eye can occur in one or both eyes. As the disease progresses, a cloudiness appears on the eyeball. This cloudiness can vary in color from white to yellow and may develop into an ulcer. In severe cases, the eyeball becomes cone-shaped and may rupture, causing blindness.

According to Dr. Baker, when treated early, pink eye usually responds well to antibiotic preparations. He says that ointments and lotions are preferable to powders because the latter often causes irritation. The medication should be applied at least once a day and preferably two or three times a day. Treatment is longer and more difficult when the eyeball has become cloudy or ulcerated. In these cases, veterinarians frequently inject an antibiotic and cortisone under the eyelids.

"The importance of shielding the eye from sunlight," says Dr. Baker, "is part of the treatment that should not be overlooked." It can be done by confining the animal, or animals, indoors or by putting a patch over the affected eye. There are commercial patches, similar to those worn by human beings, on the market, but many cattlemen use a

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Pink Eye in Cattle (cont'd)

piece of cardboard. It should be large enough to completely cover the eye and be attached to the upper eyebrow with "bull cement" (the term used by cowboys for the glue that is used to put the tags on the backs of cattle at auction markets). Although an animal often rubs the patch off in a few days, it usually stays on long enough to help the eye to heal.

Among the factors that make cattle susceptible to pink eye are a deficiency of vitamin A, dust, flies, strong sunlight, wind, tall grass and anything else that tends to irritate or injure the eye. Dr. Baker recommends doing everything possible to minimize these conditions. The fact that infected animals can remain carriers for more than a year makes the elimination of pink eye difficult, if not impossible.

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FOOD MARKETING BRANCH MOVE

The Edmonton staff of Alberta Agriculture's Food Marketing Branch has moved to the third floor of the Melton Building, 10310 Jasper Avenue, Edmonton, T5J 2W4. The telephone number for the project manager and marketing officers is 427-4036.

The commissioner of the Food Marketing Branch, Frances Cullen, and the program planner, Gay Thomson, are remaining in the Agriculture Building.

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July 11, 1977

FOR IMMEDIATE RELEASE

SILAGE TREATED WITH SULPHUR DIOXIDE

An experiment on the practicality of using sulphur dioxide to preserve legume silage will be carried out this summer at the University of Alberta's research farm at Ellerslie.

Dr. G.W. Mathison of the department of animal science points out that sulphur dioxide inhibits microbiological growth and plant respiration in silage, both of which cause loss of nutrients, particularly in high legume silage. This type of silage has a high concentration of protein and a relatively small amount of sugars.

Formic acid and sodium metabisulphite have been used to preserve silage, but both are relatively expensive compared with the surplus sulphur in this province.

An experiment was carried out last year to find out whether it would be economically feasible to use some of this sulphur as a preservative for silage. It was because those results looked promising that the current experiment is going to be undertaken.

In last year's experiment, 20 steers were divided into five equal groups and fed plain silage, and silage treated with a low level (0.18 per cent of forage weight) of sulphur dioxide; a medium level (0.5) of sulphur dioxide and a high level (0.9) of sulphur dioxide. The fifth group received baled hay.

Results at the end of the 15-day feeding period showed the dry matter intake, as a percentage of body weight, was 1.15 for the animals which received plain silage; 1.24 for those that received a low level of sulphur dioxide; 1.41 for the group that received a medium level of sulphur dioxide; 1.5 for those that received a high level of sulphur dioxide and 1.8 for the steers that received baled hay.

In this year's experiment, due to start about the beginning of August and to continue for two or three months, the scientists hope to discover a practical way of incorporating the sulphur dioxide into the silage and to find out which level of incorporation is the most profitable.

The Research Council of Alberta is co-operating with the university in this project, which is being funded by Alberta Agriculture. Results are expected to be available at the end of the year.

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July 11, 1977

FOR IMMEDIATE RELEASE

FARM SAFETY SEMINARS FOR YOUNG FARM WORKERS

Farm safety orientation seminars will be taking place throughout Alberta from now until July 22.

Sponsored by Alberta Agriculture's farm development division and Alberta Labour's occupational health and safety division, the seminars are being held for young people who will be working on farms this summer under the provincial Summer Temporary Employment Program. The purpose of the seminars is to make participants aware of the needs for farm safety, to improve their attitudes towards safety and to create a realization of the importance of their own safety.

The seminars will stress the factors that cause farm accidents, the consequences of accidents and the measures that can be taken to avoid them. Films will be shown to illustrate some of the factors that contribute to farm accidents.

Unlike the seminars that have been held during the past two summers, this year's seminars will be based solely on group discussions, and are a modified version of seminars available to adult farmers in the province. In other words, the 15 or so participants will discuss among themselves what they see as the potential dangers when working with farm machinery, livestock, agricultural chemicals, etc., and what they consider to be the best ways of avoiding them.

Prior to the commencement of each seminar, participants will be given a comprehensive farm safety manual to study so that they have a good background of knowledge on which to base their discussions.

The data being used in this year's seminars were derived from Alberta's farm accident monitoring system. During the past two years, the seminars were based on information obtained from Saskatchewan and the United States.

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July 11, 1977

FOR IMMEDIATE RELEASE

SOCIETY FOR RANGE MANAGEMENT TOUR

The range management tour that is sponsored each year by the Society for Range Management and local agricultural service boards is being held in the Consort area (Special Areas 4) on July 14 and 15.

Registration will take place at 12 noon at the Consort Sportex Building. Tour members will see Russian wild rye, Reed canary grass,sainfoin, Altai wild rye and native range. They will also participate in a plant identification contest. This year's agenda also includes a brush control demonstration and a feedlot operation.

Camping facilities are available at Gooseberry Lake Park, nine miles north of Consort, and a steak supper and social hour will be held at the same location on the evening of July 14.

Further information can be obtained from Art Spencer at 854-4451 or Gloria Nelson at 577-3523.

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FOR IMMEDIATE RELEASE

PLASTIC BAGS FOR HOUSE PLANTS

Are you having trouble finding a babysitter for your house plants while you are on holiday? Alberta Agriculture's horticulture branch may be able to help you.

Information received from the Ontario Ministry of Agriculture and Food says that if you put well-watered and fertilized plants into a loosely-tied plastic bag, they can be left for up to three weeks without any attention. The plants should be placed in a north-east window where they get only indirect sunlight.

You can create a humid atmosphere for large plants by putting them into a large plastic bag, such as that used by dry cleaners,or by putting them into a plastic lined laundry tub containing moistened peat moss. When using either method, be careful not to over water the plants. Too much water cuts off oxygen from the roots and can kill the plants.

If you are worried about your outdoor plants while you are away, you should cover the soil around them with grass clipping or a straw mulch and then give them a good drenching. Under these conditions, the soil will usually remain moist for several weeks.

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July 11, 1977

FOR IMMEDIATE RELEASE

A TRAVEL WARDROBE

by Marilyn Hemsing
Clothing and Textile Specialist
Alberta Agriculture

Vacation time starts us thinking about our wardrobe. What will I pack, what will I wear, what new items do I need?

If you are the type to backpack into the wilderness, or cross the country on a motorbike, a pair of jeans, a couple of warm shirts and a warm waterproof jacket will complete your ensemble. But most of us want more variety in activities, and, therefore, require different types of clothing.

Fabrics

Knit fabrics are your best choice for comfort and easy care. Jerseys, warp knits, and doubleknits pack easily because they don't wrinkle or crease and they maintain a good appearance during wear.

Woven fabrics wrinkle and will probably require at least touch up ironing. A travel iron would be an asset, and doesn't take up much space. Consider the type of laundering facilities you are likely to have.

Garments

Try to anticipate the varied activities you may encounter, and take only one outfit for the activities on the "maybe" list. Plan to coordinate these "maybe" items with the clothes you know you will use.

Select suitable garments for all temperatures and weather conditions. Rainy, cool days seem to find their way into nearly everyone's vacation, but, hopefully, warm sunny days will take precedence! A coat - preferably water-resistent - or a warm sweater are essentials.

Coordinates

Coordinates are invaluable in a travel wardrobe - for folks of any age! If a jacket can be worn with a skirt, pants, shorts or a dress in addition to it's matching garments - take it! Then coordinate other pieces to wear with more of the garments. With a limited number of

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Alberta
UNICATIONS

A Travel Wardrobe (cont'd)

garments, you can appear to have a varied and extensive wardrobe.

But beware! If you will be in contact with the same people for several days, you may quickly tire of wearing the same few clothes mixed and matched. It would be a pleasant change to see a different color occasionally!

Coordinates, of course, are not necessarily centred around traditionally basic colors - navy, brown, grey and black.

Select any outfit you like that can be worn with at least one other article in your wardrobe. You may be surprised how many articles you have that can be mixed and matched. Perhaps only a new shirt blouse or pair of slacks are needed to tie it all together.

Accessories

Don't forget accessories - jewellery, scarves, etc. They don't take up much space, and can brighten up even a "tired" wardrobe at the end of a vacation. Shoes take up space, so try to select one color to go with most outfits, plus comfortable walking shoes, and a pair of slippers or beach sandals.

Planning and Packing

It's wise to lay out all the items you think you will need, along with all the accessories to accompany each outfit. This way, you won't forget important items; you can count the number of different ensembles you have and you can see how much you have to pack.

Before any item is packed, give it a critical eye. Is it really necessary? Is it clean and in good repair? Where would it be most useful to you - in your suitcase, overnight case or purse?

First, pack odd shaped items such as shoes, camera, makeup case, curlers, blow drier, curling iron, razor, hairspray, clock. Fill in the spaces with lingerie and crush-proof clothing. Place the heavy items at the side opposite the handle.

Next, layer garments, beginning with the least used or least crushable. Fold each garment smoothly with as few folds as possible. Include tissue paper in the folds of garments which wrinkle.

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A Travel Wardrobe (cont'd)

By layering the clothes, the top layer can be removed down to the articles you want, without disturbing anything.

Don't Forget

- small jar of detergent for hand laundry
- soap and facecloth
- shampoo and curlers
- sanitary supplies
- razor
- deodorant
- camera
- spot remover
- aspirins, prescription drugs
- alarm clock
- sewing kit with needle, thread, pins, masking tape
- a few hangers for emergencies

Word of Advice

Spread all the things out that you plan to take. Pack half the clothes and take twice the money, and you should come out about right!

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AGRI-NEWS

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FOR IMMEDIATE RELEASE

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FOR IMMEDIATE RELEASE

ASSISTANCE FOR DROUGHT–STRICKEN FARMERS

Acting Agriculture Minister, Dallas Schmidt, has announced new initiatives on behalf of Alberta Agriculture and the lands division of Alberta Energy and Natural Resources, to help farmers alleviate the current drought situation which prevails in some parts of the province.

Alberta Agriculture will be operating a referral service, through its extension offices and district agriculturists, for people who want to move their livestock to areas of the province where forage supplies are more plentiful. Hence, farmers who want to find pasture for their animals, and farmers who have pasture available, are urged to contact their district agriculturists, who will then attempt to put the two parties in touch with each other. Financial negotiations regarding pasture rates and livestock transportation will be the responsibility of the people engaged in the transaction.

Mr. Schmidt also indicated that Alberta Energy and Natural Resources is prepared to allow individuals with grazing leases, presently underutilized, to make these pastures available to farmers wishing to relocate their livestock. However, the number of animals which may be moved to grazing lease land will be restricted to the carrying capacity of the pasture. Anyone who wants to take advantage of this opportunity should contact his district agriculturist and his local Energy and Natural Resources representative.

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July 18, 1977

FOR IMMEDIATE RELEASE

FORAGE SEED COUNCIL ESTABLISHED

Marvin Moore, Alberta's minister of agriculture, has announced the formation of the Forage Seed Council.

Mr. Moore stated that the council, which is the result of an in-depth study conducted by the Forage Seed Study Group appointed in 1975, will provide the forage seed industry with a structure to meet and discuss problems related to the industry and to develop solutions. It will also advise the minister of agriculture and Alberta Agriculture on policy matters. It is envisaged that the council will prepare and distribute news letters containing production, marketing and research information to growers, processors and governments and will act as a liaison between each sector of the industry to reduce conflicts and resolve problems.

Although members of the council have not yet been appointed, it is anticipated that the council will be in operation by October, 1977.

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July 18, 1977

FOR IMMEDIATE RELEASE

SOVIET AGRICULTURE

Canadian grain sales to the Soviet Union will switch from wheat to feed grains within the next few years.

This is the opinion of John Channon, chairman of the Alberta Grain Commission, who just returned from a tour of the Soviet Union and nine other countries in Europe and the Middle East.

Mr. Channon estimates that by 1980, when the minimum/maximum wheat agreement between the Soviet Union and the United States expires, the former will more than likely be self-sufficient in wheat. He bases this estimate on the crops he saw in two of the main wheat growing areas of the U.S.S.R. and on information given to him by Soviet officials.

Mr. Channon expects this year's total Soviet grain crop to be in the neighborhood of 230 million tonnes. "At the present time that country is the largest wheat producer in the world," he says, "and this year's carryover is larger than usual. In view of this situation it would be unrealistic to expect wheat prices to rise for at least another year."

According to Mr. Channon the Soviet Ministry of Agriculture is busy expanding the livestock and poultry industries in that country. One collective farm in Siberia, for example, had 4.5 million laying hens in addition to a large acreage of greenhouses where very high quality cucumbers, melons and tomatoes were being produced.

Another collective farm visited by Mr. Channon had 112,000 hogs. He was told by the Soviet officials that 11 more such hog operations are either already in operation or are planned for the near future.

On another collective farm Mr. Channon saw irrigated pastures where the workers use forage harvester equipment to take off the forage, which is then fed in the form of "green chop" directly to cattle or stored as dehydrated pellets. No livestock are allowed to graze on these pastures, which, Mr. Channon was told, yield four cuttings a year.

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Soviet Agriculture (cont'd)

He says productivity per acre on collective farms producing grain and forage is as good as, or better than, that in Alberta, but that productivity per man-hour is relatively low because of the number of people working on these farms. Apparently, there is always at least one person herding cattle and sheep on farms where they are allowed to graze.

"The combination of self-sufficiency in wheat and the rapidly increasing livestock and poultry industries," Mr. Channon says, "means that the Soviet Union's import requirements are already shifting from wheat to feed grains."

In addition to the Soviet Union, Mr. Channon visited the United Kingdom, Ireland, Switzerland, Greece, Libya, Saudi Arabia, Israel and Iran. In Libya he met with private traders who were interested in purchasing dehydrated alfalfa pellets from Alberta, and in Saudi Arabia he discussed a joint cattle and sheep feeding venture. Israel was interested in buying lean front-ends of beef, while Iran wants to purchase hard white wheat from Alberta. Mr. Channon says the whole Moslem world is interested in this type of wheat, and that it is time we started switching some of our wheat acreage to supply this market.

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July 18, 1977

FOR IMMEDIATE RELEASE

1977 AGRICULTURAL LAND VALUE PROSPECTS

The value of agricultural land transfers*, monitored in Alberta during the first three months of this year, indicate that the 1977 price average will increase considerably, but by a smaller amount than has been the case over the past three years.

Alberta Agriculture's resource economist, Bob Prather, reports an average price increase of 13 per cent during the first quarter of 1977 compared with the same period in 1976, and says that if this level of increase holds for the remainder of the year, an average value of $200 per acre can be expected. The average agricultural real estate value in Alberta last year was $177 per acre, an increase of 22 per cent over the 1975 average value of $145 per acre.

While the average value for agricultural land was up in the first quarter of this year, the acreage transferred was almost 22 per cent below the figure for 1976, reflecting some restriction on the real estate market at prevailing price levels. This situation implies a possible drop in acreage transferred in 1977 to an estimated 2.3 million acres. The acreage transferred in 1976 was 3 million acres.

Following are some of the factors that should be considered when evaluating possible further developments in the 1977 real estate market.

- The increases in the average value of land in Class 1 and Class 2 soils during the first quarter of this year were 28 and 30 per cent respectively, or more than double the increase for all classes of soil.
- Class 1 and Class 2 land represented 26 per cent of the total acreage transferred during the first quarter of 1977.
- More than 84 per cent of the transferred land was arable and included 58 per cent in the good crop category (Class 1 to 3 inclusive).
- Acreages of Class 1, 2 and 3 land transferred in the first quarter of 1977 decreased by approximately 22, 30 and 27 per cent respectively.

* Agricultural land transfers are defined as parcels of more than 60 acres and can be valued anywhere from $5 to $1,001 per acre.

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1977 Agricultural Land Value Prospects (cont'd)

- The average value of agricultural land transferred in March of this year was only about 6 per cent above the 1976 March value, whereas the January and February values were about 18 and 17 per cent above those recorded during the same months in 1976.

Mr. Prather points out that the value of real estate transferred during the first three months of this year should be considered only as a rough guide to conditions that may prevail during the remainder of the year. However, there are definite indications of higher values, especially for the better land, and there are definite indications of a significantly lower land turnover rate than that which occurred in 1976.

"There is still a demand for good agricultural land," says Mr. Prather, "but it is smaller than it has been over the last few years because of the higher prices and last year's lower net farm incomes. However, the demand for land for such agriculturally non-productive purposes as country residences, hobby farms, speculation, etc. has not decreased because the incomes of buyers in these categories have increased in the past year and because of the increased value of land as an investment."

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FOR IMMEDIATE RELEASE

RABBIT NUTRITION

Rabbit nutrition will be the main topic of discussion at a public meeting of the Rabbit Breeders Association of Alberta, scheduled to take place at the Northern Alberta Institute of Technology at 2:00 p.m. on July 23.

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FOR IMMEDIATE RELEASE

PROTEIN FROM LEAVES

Have you ever thought of weeds as a rich source of protein?

More than a quarter of a century ago a young man working at Cambridge University in England became convinced that the green part of plants could be used as a source of protein if a way could be found to extract the protein. Despite interruptions due to other commitments, Norman Pirie persisted over the years with this work and eventually developed an extraction process.

Essentially, the process is simple: fresh green material is forced through a screw press which extracts the juices. Then the protein in the juices is coagulated by heat and strained out as a kind of cheese.

Work at the British National Institute for Research in Dairying has shown that the fibrous residue that is left can be used as feed for cattle and other ruminants. The sugary whey which runs off the protein after extraction could be used as a base for processes involving bacteria, the scientists say.

"Apart from conventional herbage crops", says Mr. Pirie, "there is an enormous potential for extracting protein from plant species regarded as weeds as well as from the residues of farm crops." He has calculated, for example, that sugarbeet tops, of which more than two-thirds are simply plowed back into the soil in Britain, could provide the country with 50,000 tons of protein a year.

"Another 50,000 tons of protein could be produced from potato stems which are not used at all", he says. Work on this material is now going on at the Rothamsted Research Institute in England. "Any harmful alkaloids", Mr. Pirie says, "are easily removed by washing the product with acid."

The main use of leaf protein in countries like Britain seems likely to be in animal feeds. Elsewhere, however, it could well be used in the human diet. Leaf protein is said to be equivalent to the protein of fish, but not as good as that from eggs and cheese.

Development work on the pressing process is still not complete, but there are reasonably

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Protein From Leaves (cont'd)

efficient versions capable of working with a power requirement as low as one-third of a horsepower (250 watts). In fact, according to a British report, a low power press has been successfully used in trials in southern India where the protein shortage is acute.

There, locally made material, based on lucerne (alfalfa), and mixed with brown sugar and cereal, was fed to children as a supplementary food in the form of small cakes. Other children were given supplements based on skim milk powder and on pulses.

The children apparently relished and thrived on the sweet cakes. In terms of the children's height and weight gain, the cakes appeared to be almost as good as the milk powder supplement and slightly better than the pulses.

An incidental benefit from the leaf protein, says the report, came from its richness in vitamin A. Vitamin A is often deficient in some diets and the deficiency may, if not corrected, lead to blindness at an early age.

An official of Alberta Agriculture's plant industry division says similar work to that done by Mr. Pirie is being done with alfalfa leaves in Davis, California, U.S.A. At the University of Wisconsin, also in the United States, a 50 per cent protein product is being obtained by squeezing the juice from alfalfa specially grown for this purpose.

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FOR IMMEDIATE RELEASE

FARM ACCIDENTS

The accidental death rate on Canadian farms is estimated to be 20 per cent higher than the national average.

According to the Canadian Safety Council, the total number of fatalities is now higher for farming than it is for any other industry and is exceeded only by mining and construction in the accidental death rate per number of workers.

Studies disclose that farm machinery fatalities per 100,000 farmers have doubled over the past 10 years, but even more disturbing is the break-down of these statistics. It shows that 20 per cent of the deaths are in the under 10 age group, and that 17 per cent are between the ages of 10 and 19.

Of all fatal machinery accidents, 78 per cent involve tractors,and of these more than half are overturn accidents. The machines most commonly involved in fatal accidents after tractors are combines, balers, forage harvesters and spreaders,in that order.

More than half the field machinery fatalities, not counting tractors, are caused by the victim being caught in a machine,and 20 per cent are caused by passengers being run over.

Since most farm machinery accidents are caused by unsafe operating practices and poor maintenance, it is up to the farmer to prevent needless deaths and injuries, says the Canada Safety Council.

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FOR IMMEDIATE RELEASE

SILAGE GAS CAN KILL

The greatest danger of silo gas poisoning occurs during the three-week period immediately after the silo has been filled. The gas can cause severe lung damage and death.

Silo gas is produced during the fermentation process and is a combination of carbon dioxide and nitrogen dioxide. In tower silos it can collect in the silo, the silo chute, the silo room and a connecting barn. Because carbon dioxide and nitrogen dioxide are heavier than air, they tend to settle in the space above the silage and near the floor in connecting areas.

The best way to avoid silo gas poisoning is not to enter the silo for three weeks after it has been filled, and to keep the door between the silo room and a connecting barn closed. The windows and outside door of the silage room should be left open for at least two weeks for ventilation. Do not allow children and animals near the silo during the danger period.

If it is absolutely necessary to enter the silo during the danger period, run the blower for at least 15 or 20 minutes to ventilate the silo, the silo chute, the silo room and any connecting buildings. Before entering the silo make sure there is an easy way out, and never go in alone. Use a lifeline and a self-contained breathing apparatus. At the first sign of coughing, or throat irritation, get out of the silo as quickly as possible. Call a doctor immediately because severe lung damage can develop even after apparent recovery from exposure to silo gas.

Larry Gareau, forage crops specialist with Alberta Agriculture, advises farmers who use tractor wheels to pack forage in a horizontal or pit silo to take the following precautions:

- Have a roll-over bar on the tractor.
- Spread the forage evenly on the silo face to reduce the chance of the rear wheels digging down in a soft spot. This could cause the tractor to overturn.
- Never allow a tractor to free-wheel backwards down the slope. Use the reverse gear, and avoid suddenly engaging and disengaging the clutch.
- Never allow an inexperienced operator to drive a tractor in the silo.
- Consider the use of weights on the front end of the tractor. A load of rocks or earth in the front-end loader can be used for this purpose. A blade mounted on a three-point hitch at the rear of the tractor will also prevent the tractor from tipping over backwards.

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FOR IMMEDIATE RELEASE

FRESH VEGETABLES

Do you like fresh vegetables and fruit? Do you like to pick them yourself or to buy them directly from a market gardener?

If your answers to these questions are yes, you will find a publication "Alberta Market Gardeners" very useful. Just issued by Alberta Agriculture, it lists the names and addresses of many of Alberta's market gardeners and gives directions on how to get to their farms. The list is divided into eight main areas. They are Peace River, Bonnyville, Edmonton, Red Deer, Calgary, Medicine Hat, Lethbridge and Drumheller.

The publication also tells how many days and which days the market gardens are open to the public, the months they will be operating and whether the vegetables etc. are sold on a pick-your-own basis, at the farm gate or at a farmer's market.

Copies of "Alberta Market Gardeners" can be obtained from the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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Alberta
AGRICULTURE
COMMUNICATIONS

Phone (403) 427-2127

July 18, 1977

FOR IMMEDIATE RELEASE

EXPORTING HONEY

Are you interested in exporting honey?

Dr. Ulf Soehngen of Alberta Agriculture's apiary branch reports that he is compiling a list of registered beekeepers who are interested in exporting honey through the department's international marketing sector. The sector's staff regularly receive inquiries from Canadian and foreign import/export companies regarding quotations on bulk Alberta honey.

Dr. Soehngen will forward the list to the international marketing sector which, in turn, will forward it to the import/export companies. Beekeepers will be contacted direct when there is an order for their honey. There is no charge for the international marketing sector's service, but all import/export companies charge a brokerage fee.

Dr. Soehngen points out that a beekeeper who wants to export honey must register with the federal fruit and vegetable division in addition to being registered with the provincial apiculture branch.

If you would like to be included on the international marketing sector's list, you should contact Dr. Ulf Soehngen, O.S. Longman Building, 6905 - 116 Street, Edmonton, T6H 4P2.

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July 18, 1977

FOR IMMEDIATE RELEASE

THE GREAT ALBERTA GET TOGETHER

Alberta's farmers and food processors face the challenge of producing quality products at competitive prices. Consumers must decide which products to buy according to their family's needs and preferences, and their food budget.

The Great Alberta Get Together, this year's agriculture feature show at the Edmonton Exhibition's Sales Pavilion, is giving these two groups a chance to mingle and perhaps understand each other a little better. The Great Alberta Get Together is designed to give consumers a better idea of the problems involved in growing food and in getting it from the farm to the grocery store shelf. It also shows how a strong agricultural economy benefits all Albertans.

As in past years, however, the focus of the feature show is on fun and activity. This year's highlights include the sheep, pork and poultry industries, and the Agri-Prom Association of Alberta, a group made up of members of Alberta's food processing industry.

Admission to the feature show is free. Once inside, visitors will find games, entertainment, displays, demonstrations, animals and a restaurant that many people think serves some of the best food on the exhibition grounds.

The games are an important part of the Great Alberta Get Together. They combine fun and prizes with information about different aspects of agriculture and food. A year's supply of groceries is the biggest prize.

In this contest, people have to correctly answer questions about agriculture in Alberta. Another game involves teams piecing together a giant puzzle in the shape of a map of Alberta. Agri-Prom is again operating the wheel of chance, and awarding food products to the winners. During the daily sheep shearing demonstrations, the audience is invited to compete for prizes by guessing the weight of the fleeces.

Around a dozen Agri-Prom members are operating a family restaurant at the feature show. This year's menu includes lasagna, Ukrainian food, pizza, spaghetti, lamburgers, dairy drinks and wines, all Alberta produced. Other Agri-Prom members have display booths,

- (cont'd) -

The Great Alberta Get Together (cont'd)

many offering demonstrations and food samples.

Since the feature show would not be complete without animals, there are piglets, lambs, chicks hatching in an incubator, and the Ken Jen Zoo, a collection of many different small animals. Something new is the MacCaw Show which highlights chickens and rabbits doing tricks in several shows daily, plus coin-operated animal acts which run continuously. A trained sheep act also takes place outside the Sales Pavilion several times each day.

Handicraft demonstrations at the feature show revolve around items relating to the three featured products: leathercrafts, woolcrafts, feather jewellery, eggshell crafts and Ukrainian egg coloring.

For those who just want to rest their feet awhile, the Allan Raymond Show is entertaining each evening between 6:00 and 10:00 p.m. on the feature show stage.

Each afternoon at 4:30 members of the media and personalities-about-town try their hand at the fine art of egg beating, and compete in races involving cracking, separating and whipping the whites of a dozen eggs.

Food, entertainment, prizes and things to see and do. They are all part of the Great Alberta Get Together, taking place daily from noon until 11:00 p.m. in the Sales Pavilion just west of the Klondike Palace. Bring the family for a closer look at agriculture and at the Great Alberta Get Together!

For more information, contact Denise Spink (488-2125) or Don Scheer (427-5077) in Edmonton.

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July 18, 1977

FOR IMMEDIATE RELEASE

GOAT DISPLAY AT KLONDIKE DAYS

For the first time the Alberta Goat Breeders Association will have a display at Klondike Days in Edmonton.

The display has been set up in the sheep section of the livestock pavilion in response to the increasing number of requests for information about dairy goats.

It will consist of pictures illustrating what a good dairy goat should look like and a pamphlet containing general information on goats. A representative of the Alberta Goat Breeders Association will be on hand to answer questions about raising goats and the nutritional value of their milk and other products.

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LACOMBE RESEARCH STATION FIELD DAY

The annual crops field day will be held at the federal research station at Lacombe on August 4.

Starting at 1:00 p.m., this year's field day will feature grain varieties, forage species and weed studies and crop fertilization. Transportation has been arranged for tours of the cereal, forage, horticultural and crop management experimental plots.

Coffee will be supplied between 12:00 and 1:00 p.m. at the picnic grounds for those who bring a picnic lunch.

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July 18, 1977

FOR IMMEDIATE RELEASE

WINTER WHEAT MEETING

"Winter Wheat -- Its Potential on the Prairies" is the theme of a public meeting to be held at the Agriculture Centre at the federal research station in Lethbridge from 1:00 to 5:00 p.m. on July 19.

Topics on the agenda include "Marketing Prospects for Prairie Winter Wheats"; Winter Wheats -- Quality Considerations"; "Varieties and Breeding Programs in Winter Wheats"; "Agronomics, Cultural Practices and Management - Potential for Improvement through Extension"; "Handling, Storing and Moving Winter Wheats - A Grain Company's Point of View"; "Winter Wheat Production - A Producer's Point of View"; "An Overview" and "Where Do We Go From Here?". The last topic will be in the form of a panel discussion with a question and answer period.

Sponsored by the Canadian Wheat Board, Agriculture Canada and Alberta Agriculture, the meeting will feature speakers from the Canadian Wheat Board, the Canadian Grains Commission, the Pioneer Grain Company, the federal research station at Lethbridge, a winter wheat producer and Alberta Agriculture.

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AGRI-NEWS

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July 25, 1977

FOR IMMEDIATE RELEASE

FARM SAFETY POSTER CONTEST WINNERS ANNOUNCED

The overall winner of Alberta Agriculture's farm safety poster contest.

A grade four student from Clyde is the overall winner of Alberta Agriculture's farm safety poster contest.

He is Harry Humm of the Eleanor Hall School who won the competition with his poster depicting the safe and the unsafe use of a farm tractor. About 100 competitors from grades one to four participated in the contest.

In addition to the overall winner, there were provincial winners from each grade. Harry Humm took the first prize in grade four, Kari Germann of the Westlock Elementary School, Westlock, took second prize and David Machell of the Olds Elementary School, Olds, was awarded third prize.

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Farm Safety Poster Contest Winners Announced (cont'd)

In grade three, Nancy Hillgardner of the Westlock Elementary School and Robin Sutmoller of the Hugh Sutherland School, Carstairs, tied for first prize. Marie Flexhaug of the Warner School, Warner, took second prize. There was no third prize awarded for this grade.

In grade two, Karen Rosenau of the Youngstown School, Youngstown, was awarded first prize. Mark Sabo of the Dorethy Dalgliesh School, Picture Butte, was second and Darcy Conley of the Ross Ford Elementary School, Didsbury, was third.

In grade one, Aaron Harvey of the Dorethy Dalgliesh School took first prize. The second prize went to Carla Meikle of the Ross Ford Elementary School, and the third prize was awarded to Sheri Madge of the Youngstown School.

The purpose of the contest, held for the first time this year, was to focus the attention of children and their parents on potential farm accident situations so that they are in a better position to avoid them. The winning posters from each grade will be used in a coloring book for pre-school children. The idea here is to get the children to think in terms of farm safety even before they go to school.

Those who participated in this year's contest, organized by Solomon Kyeremanteng in co-operation with the agricultural societies, were asked to show in their posters what they thought were potentially hazardous situations regarding such things as livestock, agricultural chemicals and machinery, and then to show how they would avoid them.

Teachers in each of the participating grades picked a winning poster and submitted it to the local agricultural society or to Alberta Agriculture if there was no local society. A winning poster was then picked from the participating grades of all the schools in the area and sent to Alberta Agriculture where the provincial winners and the overall winner were selected. All the winning posters will be printed as official Alberta Farm Safety posters.

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July 25, 1977

FOR IMMEDIATE RELEASE

HOG PRICE AND SUPPLY OUTLOOK

Alberta hog prices are expected to average in the mid-$50 per hundredweight level (dressed weight) during the third quarter of this year.

However, in Alberta the average price could much more closely approach the Eastern Canadian price of between the high $50's and the low $60's per hundredweight if both areas are on an import basis with the United States during this period. "For this to happen," says Alberta Agriculture's market analyst, Maurice Kraut, "Western prices would have to relate to U.S. prices,plus cost of importing and relative dollar values,rather than being based strictly on Eastern prices minus transportation costs."

Since Canada will be on an import basis for the rest of this year, prices here will be determined by the U.S. price with some qualifications. Current indications are that the U.S. average hog price basis Omaha in the third quarter of the year will be in the low to mid-$40 per hundredweight range ($53.25 to $58 dressed equivalent). Prospects are that the average U.S. price in the third quarter will be about the same as the average price in the second quarter.

Canacian Supply Prospects

Third quarter marketings, as reflected by hogs under three months of age in the April 1 Hog Survey, indicate that Canadian marketings will be up 5 per cent over the same period in 1976. Eastern Canada is expected to be up 5 per cent, Western Canada up 6 per cent and Alberta up 7 per cent.

Fourth quarter marketings, as reflected by the April-June farrowing intentions, indicate Canadian marketings will be up 4 per cent. Eastern Canada is expected to be up by 5 per cent, Western Canada up by 3 per cent and Alberta up by 3 per cent.

According to Mr. Kraut, these projections are subject to considerable variation because of possible unsurveyed new entrants into the industry. He says "Western Canada, with its relatively low production volumes and a great deal of potential for expansion, may already

-(cont'd)-

Hog Price and Supply Outlook (cont'd)

have enough incentive from the anticipated lower grain prices and increased grain stocks to expand rapidly. In fact there are indications in Alberta that hog production will expand at a faster rate than that indicated by the survey.

United States Supply Prospects

Interpretations based on the U.S. June 1 Hogs and Pigs on Farms Survey indicate that third quarter marketings in that country may be slightly higher than second quarter marketings, and that fourth quarter marketings will reach the high levels recorded in 1976.

Mr. Kraut reports that American hog producers have indicated intentions to farrow 6.1 million sows during the June-November period, representing an increase of 5 per cent over the same period in 1976 and of 24 per cent over the same period in 1975. Assuming an average litter size, the resultant pig crop could reach 44.4 million animals. If this situation materializes, the production increase for June to November will be up 5 per cent compared with the same period in 1976, or the largest since June - November in 1971.

"Given the current profitability level in hog production and the prospect for even cheaper grain, the expansion in hog production will continue through most of 1978 and possibly into 1979," Mr. Kraut says.

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July 25, 1977

FOR IMMEDIATE RELEASE

CATTLE OUTLOOK

Barring any large-scale marketings because of drought, the average price of A1 and A2 slaughter steers is expected to range between $38 and $42 per hundredweight (basis Calgary) and could go up to $45 or better at times during the third quarter of this year.

Alberta Agriculture's marketing analyst, Maurice Kraut, says the average price for the third quarter should be $2 per hundredweight over the same period last year, and marginally above the second quarter of this year, if there are no further drastic herd reductions. In the latter part of the first quarter a great many yearlings went to market because of spring drought conditions.

"Feeder cattle of 800 pounds or more will continue to follow the price pattern set by slaughter cattle," Mr. Kraut says, "but they are not likely to exceed slaughter steer prices because feeding margins are not sufficiently positive to warrant any higher price." He expects light weight feeder (300 to 500 pounds) prices to be at a premium over slaughter cattle prices because of the potential export market in Ontario and the United States and anticipated lower feed grain prices.

Fourth quarter prices, particularly late in the quarter, for all classes of cattle should be higher than the third quarter prices, and higher than they were during the same period in 1976. However, this situation depends upon relatively favorable weather and crop conditions.

The U.S.D.A. Outlook and other American outlook publications indicate price and volume projections similar to those for Canada. The average price range for choice slaughter steers (basis Omaha) is anticipated to be $42 to $44 per hundredweight during the third quarter of this year. Fourth quarter projections are for an average price range of $43 to $45 per hundredweight for choice steers. Up to now Calgary and Omaha street prices have been within $2 per hundredweight of each other, and this relationship is expected to continue during the third quarter.

Mr. Kraut expects prices for good cows to range from $23 to $26 per hundredweight, which will be above the 1976 average and $2 to $3 below the second quarter of this year.

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Cattle Outlook (cont'd)

Weather conditions will continue to be the main factor in both Canada and the United States that will determine the volume and type of cattle marketed during the third quarter. Although cattle inventories in Canada and the U.S. have been reduced to the point where they are at or near 1973 levels, there are still a substantial number of animals in both countries.

If drought conditions persist or worsen, a large part of the Canadian potential slaughter supply will be cows and calves. If extra cows should be marketed in the third and fourth quarters, they would move into the U.S. market, which would mean Canadian cow prices would be lower than those in the U.S.,and there would be a continuation of the trend started in 1975. Such a situation would be unfortunate because it would follow two and a half years of culling. In other words, excessive slaughter now would mean excessive prices later, leading,in turn,to another period of rapid herd expansion.

On the other hand, if normal seasonal marketings occur, as is expected to be the case, cow prices will follow a more normal seasonal downward pattern, but remain higher than those of last year. "It is quite possible," says Mr. Kraut, "that there will be a two-price tier for cows, with 'good' cows oriented towards the domestic market,and priced considerably higher than the poorer quality export-oriented boning type cows. This pattern would be evident throughout the remainder of1977."

He also says there are several key factors that can affect prices in the next six months which should be kept in mind when viewing price and volume forecasts. They are:

a) The effect of reduced beef export flow to the U.S. without a similar reduction in import flow.

b) The effect of drought conditions on the anticipated marketing pattern both in Canada and the United States.

c) Expected crop yields, sales and carryover for Canada and the United States.

- cont'd -

Cattle Outlook (cont'd)

d) Continued expansion of Canadian and U.S. hog production, and its subsequent effect on beef prices.

Updates of these and any new factors affecting current cattle price projections will be carried in the "Weekly," available from the Market Analysis Branch, Agriculture Building, 9718 - 107 Street, Edmonton,T5K 2C8.

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FOR IMMEDIATE RELEASE

ALBERTA'S RABIES SITUATION

Statistics collected over the past three and a half years show that the success of Alberta's skunk and rabies control program has surpassed all reasonable expectations.

Since the beginning of 1974,only 14 skunks in Alberta have been diagnosed as rabid compared with 410 in Saskatchewan. No rabid skunks were found here from January to May of this year, while 68 were diagnosed as rabid in Saskatchewan during the same period.

During the last three and a half years,Alberta has had only one rabid dog and one rabid wolf,compared with 32 cattle, three hogs, one horse, 13 dogs, 10 cats and one coyote diagnosed as rabid in Saskatchewan since 1974.

Montana has a rabies situation similar to that in Saskatchewan. Although 152 rabid skunks were diagnosed in 1975, it is hard to get an exact picture of rabies in that state because the intensity of sampling varies from one year to another. Since 1975, when this high number of rabid skunks were taken in Montana, Alberta Agriculture has been monitoring the situation carefully. If it poses a threat here, a buffer zone, similar to that along the Saskatchewan border, will be set up along the Montana border.

How has Alberta managed to remain relatively free of rabies when it is surrounded on two sides by a fairly substantial number of rabid skunks. So far those in Montana have not started to cross the border, and the 18-mile wide buffer zone along the Alberta-Saskatchewan border is credited with having kept out rabid skunks from Saskatchewan.

Modelled after the provincial rat control program, which has kept Alberta virtually rat-free for 26 years, the rabid skunk control program, initiated in 1970, entails removing as many skunks as possible each year from the buffer zone. Residents of the zone, which extends from Cold Lake in the North to the Montana border in the South,have co-operated well with the pest control officers in their skunk removal program. Another part of the program has entailed removing all skunks on the Alberta side of the buffer zone that were within a three-mile radius of the location of skunks that were found to be rabid.

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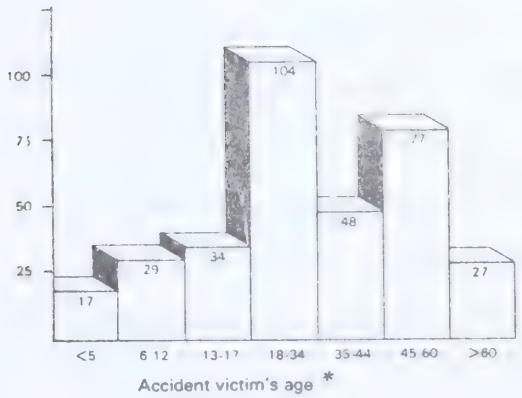
July 25, 1977

FOR IMMEDIATE RELEASE

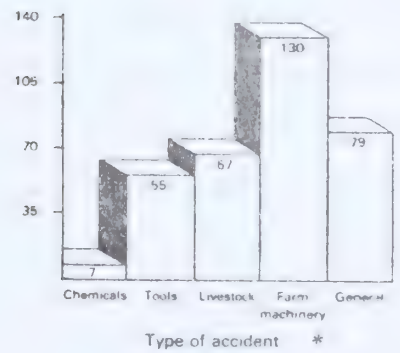
PRELIMINARY FINDINGS OF FARM ACCIDENT MONITORING SYSTEM

Who is most likely to be a farm accident victim?



Data collected by Alberta Agriculture's farm accident monitoring system (FAMS) shows the victim of an accident is most often a male between the ages of 18 and 34; a full-time farmer; married; on a mixed farm; owner of the farm or a family member and, in his opinion, in good health at the time of the accident.

According to Solomon Kyeremanteng, occupational health and safety researcher with Alberta Agriculture's farm development division, 28 deaths have been reported in Alberta during the last 12 months. All, except two caused by livestock, resulted from machinery accidents, mainly tractors.



During the last seven months, 337 injuries were reported to the FAMS by the 15 hospitals that have an agreement with Alberta Agriculture to supply statistics. These 15 hospitals, out of a total of 123, were chosen because, among them, they represent most of the typical farming areas in the province. Of the 337 injuries, 7 were caused by agricultural chemicals, 55 by farm tools, 66 by livestock, 79 by general accidents in the home, automobile etc., and 130 by machinery. The dangerous months are August and September, because of haying and harvesting, and more accidents happen on Saturday than on any other day.

Although farm accidents can occur almost anywhere on the farm, most of those reported to FAMS happened in the farmyard, says Mr. Kyeremanteng. About 33 per

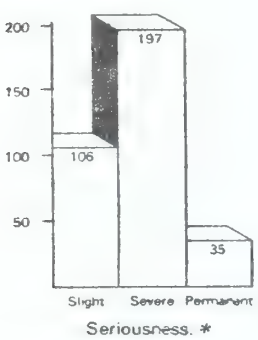
-(cont'd)-

Preliminary Findings of Farm Accident Monitoring System (cont'd)

cent took place in fields and pastures or on range land, while farm lanes, roads, highways, farm buildings, feedlots and other sites were responsible for 6 per cent. The home itself was the scene of nearly 15 per cent of the accidents.

According to FAMS data, 72 per cent of the farm accident victims had not worked more than four consecutive hours, and approximately 33 per cent had worked only two consecutive hours or less without a half-hour break. People who had worked from five to 13 consecutive hours accounted for only about 10 per cent of all the accidents reported. Twice as many accidents happen in the afternoon as in the morning.

The FAMS data also shows that fingers were the part of the body most often injured in a farm accident, with feet and legs next. These were followed closely by hands and wrists, arms and head and face and neck injuries. Eye injuries, particularly those associated with severe disablement, are common tool-related injuries. These findings echo those of the American Optometric Association which lists grinding, drilling, sawing, welding and similar activities as extremely dangerous for eyes.



About 10 per cent of the injuries reported were recorded as as permanent. More than 50 per cent were recorded as severe and the remaining were listed as slight.

"The 'why' of farm accidents," Mr. Kyeremanteng says, "is the most difficult and complicated question to answer. Often an accident seems to happen when the wrong combination of man, agent and environment come together for one split second. The best way to prevent a similar occurance is to review the various factors that contributed to the accident and to formulate alternative procedures for future use."

**(Actual number of reported farm accidents shown vertically.)*

July 25, 1977

FOR IMMEDIATE RELEASE

PACKAGE BEE EXCHANGE

An American beekeeper from Seattle, Washington, has come up with a novel idea --- he wants to exchange bees with Alberta beekeepers.

His proposal entails shaking bees here in August, shortly before they are killed, and installing them in his own hives in Washington. He intends to put two three-pound packages in each single story hive, and after the fall honey flow in Washington to move them to California to pollinate next spring's almond crop.

If all goes according to plan, he hopes to be able to shake a two-pound package from each new colony next spring, and to return packaged bees (minus queens) to the Alberta beekeepers from whom he received bees. He expects to be able to advise these beekeepers by October 10 on the number of packages he will be able to return to them.

If you are interested in trading bees for package bees next spring, you should contact Dr. Ulf Soehngen, Supervisor of Apiculture, O.S. Longman Building, 6909 - 116 Street, Edmonton, T6H 4P2, or Mr. C. C. Smith, 11842 - 5 Street, Seattle, Washington, 98168, U.S.A.

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July 25, 1977

FOR IMMEDIATE RELEASE

ALBERTA REVISITED

It is wonderful to be back! That was the reaction of Dora Davis of New Zealand whose last visit to Alberta was in 1921 when she came here as a member of the Chautauqua movement.

The Chautauqua movement started in New York during the last century and spread across the United States and to Canada, Australia and New Zealand. In the peak year of 1924,travelling Chautauqua groups visited approximately 10,000 rural communities in the United States alone, and were attended by over 40,000,000 people. At first the annual assemblies of the movement were entirely religious, but the program was gradually broadened to include general educational topics and light entertainment. Many world famous people attended the meetings as guest speakers and entertainers.

In essence, the meetings were designed to bring social development to isolated rural communities and to enrich the lives of the inhabitants. The meetings were often organized by university students during their summer holidays and held in big top tents. The visiting group took enough money from the sale of tickets to pay their wages and expenses, leaving the rest for the community to use as it saw fit.

The entertainment part of the program was designed to draw the people to the meeting, and it was as a singer with one of these groups that Mrs. Davis came to Alberta. After visiting little rural communities all the way from Winnipeg to Vancouver, she returned home and spent the next two years on the New Zealand and Australian circuits. She then married, settled on a mixed farm on New Zealand's North Island and raised four children. She was recently awarded the Queen's Jubilee Medal for her community work, which includes active membership in education, health and farming organizations.

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Alberta Revisited (cont'd)

What was Mrs. Davis doing back in Alberta after 56 years? She was here with 29 other New Zealanders who spent nine days touring dairy, beef and grain farms to get new ideas to take back to New Zealand. On several occasions the tour members stayed with host families of the Alberta student exchange program. Before leaving for a four-day visit to British Columbia, they spent an afternoon in Edmonton with Alberta Agriculture officials.

When asked what had impressed her most during her visit to Alberta, Mrs. Davis said the collosal growth that has taken place in both Edmonton and Calgary over the last half century and the tremendous expansion in the province's agricultural industry. She said the farmland here, with its many shades of green and yellow, reminded her of a huge patchwork quilt!

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July 25, 1977

FOR IMMEDIATE RELEASE

GARDEN PEST CONTROL BY NATURAL METHODS

Although a complete return to natural methods of controlling insect pests in field crops would be impractical, some natural methods can be tried in a garden where production is on a much smaller scale, and often more labor-intensive.

Of the home-prepared pesticides that are used by some gardeners, the following spray is claimed to control many common garden pests.

3 cloves of garlic (minced)

1 medium onion

3 tablespoonsful of red hot pepper

2 cups of water

Blend the onion and garlic, using the high speed on your blender, for one minute and then add the pepper. Let the mixture stand for 24 hours. Strain it and add it to one gallon of water.

Alberta Agriculture's horticultural specialist, Chris Campbell, says this preparation is harmless, but she warns that spray preparations involving the use of some boiled or ground plant parts can be hazardous. For example both rhubarb leaves and tobacco stems contain toxic properties which they would impart to any spray solution in which they were used.

Other natural methods of controlling garden pests, suggested by Ms. Campbell, include picking harmful insects off your plants, planting insect resistant varieties when these are available and controlling the pests with other plants. "Some insects," she says, "are reported to be repelled by the scent from plants like nasturtiums, tomatoes, herbs, onions, marigolds, zinnias, asters and cosmos."

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Garden Pest Control By Natural Methods (cont'd)

She also suggests trying such mechanical methods as placing a tar paper collar around the stems of plants that are attacked by cutworms and root maggots. Shingles, placed near the garden, will serve as a trap for slugs. You can lift up the shingle and kill the slugs that have collected under it.

For controlling flying aphids, Ms. Campbell suggests trying a small yellow pan (to attract the aphids) filled with water containing a detergent.

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AGRI-NEWS

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August 1, 1977

FOR IMMEDIATE RELEASE

MEAT PACKING PLANT RECEIVES FEDERAL-PROVINCIAL GRANT

Canadian Dressed Meats, which has been operating in Lethbridge for 15 years, is now breaking down beef carcasses to primal cuts and shipping them in vacuum-sealed bags. Sealing the processed beef in vacuum bags extends its shelf-life to six weeks.

The plant received a $207,544 development assistance grant (based on 20 per cent of eligible capital costs) under the Canada-Alberta Nutritive Processing Agreement to assist it in expanding the facilities for shipping primal beef cuts. Primal cuts include short loin, rib, steak, sirloin tip, hip and chuck. The expansion is expected to create 35 new jobs by the third year of operation.

According to the plant's manager, Gerry Stayura, almost 15 per cent of the boxed beef is marketed in Alberta, about 10 per cent in British Columbia and the remainder goes to Eastern markets. He says, "Where we were able to ship only about 60 head in a trailer, we can now ship about 110 head in the same sized unit."

The Nutritive Processing Assistance Agreement, cost-shared equally by the federal Department of Regional Economic Expansion and Alberta Agriculture, is designed to assist eligible food processing plants which establish, modernize or expand their facilities outside major metropolitan areas in Alberta.

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Alberta

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FOR IMMEDIATE RELEASE

HIDDEN BANGS DISEASE

The present blood tests for Bangs disease in cattle are reliable as herd tests, but not always as individual tests, particularly in the case of pregnant cows and heifers.

This was one of the main points that came out of a meeting to review the progress being made in brucellosis eradication that was recently attended by industry and government personnel in Winnipeg.

"One of the very important factors in the spread of this disease has been shown to be an unjustified faith in a single blood test," says Dr. H. N. Vance, director of Alberta Agriculture's veterinary services division, and a delegate at the meeting. He explains that pregnant animals, especially heifers, can have a negative test even though they are carrying the brucella germs. Only after they have aborted or calved will the blood test become positive.

Many herds apparently become infected when the owner purchases animals which were recently tested. Assuming that a negative test means there is no danger of brucellosis, the purchaser puts the heifer straight into his breeding herd. If it is carrying the brucella germs, the rest of the herd may be exposed to the disease when the animal either aborts or calves.

Dr. Vance stresses that anyone planning to buy a cow or a heifer should make sure that it comes from a herd with a brucellosis-negative status, and he should always isolate the animal until it has calved and been retested. "Cattlemen who purchase animals without taking precautions against brucellosis, and other diseases, are liable to be stuck with an expensive clean-up procedure," he says.

During recent years the incidence of brucellosis has increased in several provinces, but in others it is either a minor problem or no problem at all. Ontario has the

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Hidden Bangs Disease (cont'd)

highest number of herds under quarantine at the present time. It is followed by Quebec, Alberta, Manitoba and Saskatchewan.

Further information on brucellosis control can be obtained from district health of animals branch veterinarians. They are located in most of Alberta's major towns.

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August 1, 1977

FOR IMMEDIATE RELEASE

A PHOSPHORUS SUPPLEMENT FOR CATTLE

Alberta cattle that are on pasture, or on a ration with a high proportion of forage, should receive a phosphorus supplement, says Ruth Berg, animal nutritionist with Alberta Agriculture.

She explains that phosphorus is often deficient in forage-based rations in this province, and that the phosphorus content of forages decreases steadily as the grazing season progresses and the plants mature.

Cattle that are not receiving enough phosphorus can develop stiff limbs and easily broken bones. In young animals the deficiency can cause malformed bones. Poor reproductive performance is another symptom of a phosphorus deficiency.

"Cows that are deficient in phosphorus," says Ms. Berg, "will not come into heat regularly and will have a lowered fertility level." Many research studies have shown that the use of a phosphorus supplement can increase the percentage of calf crop weaned from 50 or 60 per cent to 80 or 90 per cent.

Although a phosphorus supplement is best mixed with the total ration (to ensure proper intake), it can be fed free-choice if the former method is not practical. Ms. Berg says a phosphorus supplement should contain equal parts of calcium and phosphorus and have at least 14 per cent of each. The addition of 25 per cent salt often improves the intake of phosphorus fed free-choice. A mineral mixture containing phosphorus is not usually very palatable.

According to Ms. Berg, cattle that are on pasture should normally eat one to two ounces of the supplement per head per day.

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August 1, 1977

FOR IMMEDIATE RELEASE

PREVENTING FLOODING BY BEAVERS

Research carried out by Alberta's fish and wildlife division indicates that specially designed culverts placed through beaver dams will control flooding.

Wood, metal and plastic (PVC) have all been successfully used in these culverts, but the PVC material is the lightest and easiest to install, according to the researchers. The culverts are 24 feet long and have a diameter of six or eight inches. The inlet part of the culvert is perforated with a minimum of 210 or 275 three-quarter-inch holes, depending upon which diameter is used. The actual inlet is then covered over with treated half-inch plywood or meshed wire to prevent the beavers from plugging the culvert.

The wooden culverts, used in the research projects, were constructed in two 12-foot sections. The metal and PVC models were constructed with a 20-foot drain section and a four-foot inlet section with perforations.

In areas where it is desirable to maintain a scenic beaver pond adjacent to the road, as in a park, the culvert can be capped by stretching inner tubing over the outlet. If done before the middle of September, the volume of water in the pond should increase sufficiently to allow the beavers to survive during the winter. When these caps are removed in the spring, the water will drop to the desired level.

Conventional ways of removing beaver dams by blasting the dam and trapping the animals are repetitious, time-consuming and costly. In addition to damaging property in downstream areas, by the sudden release of water, and damaging nearby structures like road culverts, blasting often has a detrimental effect on valuable wildlife habitats through loss of water.

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Preventing Flooding by Beavers (cont'd)

Information on installing and maintaining culverts that are designed to prevent flooding from beaver dams is contained in a folder entitled "Prevention of Road Floodings Caused by Beaver." It is available from local fish and wildlife offices, district agriculturists, the Fish and Wildlife Division, 10363-108 Street, Edmonton, T5J 1L7, and the publications office, Alberta Agriculture, 9718-107 Street, Edmonton, T5K 2C8.

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FOR IMMEDIATE RELEASE

NORMA JEAN GRAY AWARD

Norma Jean Gray, district home economist and regional home economist in southern Alberta for the past 36 years, has just received a long service award from Alberta Agriculture for her outstanding service. Presentation of the provincial plaque was made by John Calpas, director of extension, on behalf of the department.

Norma Jean Gray was born in Olds, the daughter of Mr. and Mrs. John Hogg. She first worked for the department 41 years ago, while attending the agricultural college there. She commenced her district home economist career in 1944 when she was appointed to the Calgary office, and became one of the five district home economists serving the whole of the province.

While Norma Jean has been outstanding as an extension worker in every aspect of the home economics discipline, she has also had a special concern for 4-H members. This involvement with the young people has been a major influence for hundreds of them over the years.

In 1950 Norma Jean married Bob Gray, moved to Brooks, became district home economist there and has served much of southern Alberta from that location in the intervening years.

In addition to her dedicated professional service to her rural clientele, Norma Jean also found time to serve her own community. She has been town councillor, and a member of the library board, recreation board, planning commission, senior citizens lodge and Order of the Eastern Star. In 1973 she was the recipient of the "Citizen of the Year" award from the Brooks Chamber of Commerce.

In 1974 Norma Jean was asked to represent Alberta Agriculture in a meat promotion campaign in Japan. Two years later she was inducted into the Olds College Hall of Fame.

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Norma Jean Gray Award (cont'd)

Norma Jean's most recent award was made in recognition of these and many other accomplishments. When the subject of recognition for service came up, she asked that any token of appreciation be made to a 4-H recognition fund. This has been arranged. Tax deductable contributions to the "Norma Jean Gray Award" can be sent to the administrator of Student Awards, Student Award Office , University of Alberta, Edmonton, T6G 2E1. The annual scholarship will be valid at any educational institution in the province.

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August 1, 1977

FOR IMMEDIATE RELEASE

FIRST ALBERTA DRAINAGE FIELD DAY

The first Alberta drainage field day will be held on August 5. It is designed to provide farmers, engineers and anybody else interested in the topic with information on surface and subsurface drainage and government programs associated with drainage.

Those who wish to attend should be in the lobby of the new Agriculture Centre at the federal research station in Lethbridge by 8:15. The agenda includes a tour of the tile drainage project of irrigated land at Magrath, the tile drainage project of dryland at Warner, and the mole drainage project at Sterling.

Another section of the program will cover government services and assistance related to drainage. Government personnel and contractors will then demonstrate drainage installation equipment. This part of the program will include a mole plow, the Badger plow, a wheel trencher, soil sampling drill units, laserplane survey systems and a rotary ditcher.

Everybody is responsible for his own transportation. Lunch will be available for a minimal fee.

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August 1, 1977

FOR IMMEDIATE RELEASE

HORTICULTURAL SHOW

Would you like to get some ideas of fruit, vegetable and flower varieties to grow in your garden next year? Or are you a lily enthusiast who would like to know more about propogating these flowers? In either case, you will find a visit to this year's Provincial Horticultural Show well worth your while.

The Alberta Horticultural Association's annual show is being held this year in conjunction with the Stony Plain Horticultural Society's Flower and Garden Show on August 13 and 14 at the recently renovated Centennial Arena, 5300-52 Street, Stony Plain.

There will be flower displays from many of the florists and greenhouse operators in the province as well as displays of fruit and vegetables and exotic flowers from around the world. The Botany and Plant Science Department of the University of Alberta, Alberta Parks and Recreation, the County of Parkland and the Alberta Horticultural Research Center at Brooks are all planning to exhibit at the show. Fred Tarlton of Edmonton will discuss the many varieties of lilies he has propagated over the years.

The publicity chairman of the show, Harry Gooding, says pioneer horticulturists, who developed many of the attractive plant varieties that we take for granted, will be honored the same evening as the banquet, which is scheduled to take place at 6:30 p.m. on August 13 at the Elks Hall in Stony Plain.

People who wish to enter exhibits in the show have until August 8 to do so. Chris Campbell, horticultural specialist with Alberta Agriculture, urges those who are not sure whether or not their entries will be ready for the show to send in entry forms anyway.

Entry forms, banquet tickets and further information on the show can be obtained from Evelyn Hohnstein at 963-3424 or Lorne Proudfoot at 987-3683, both of Stony Plain. Completed entry forms should be sent to the Stony Plain Horticultural Society, Box 60 Stony Plain, T0E 2G0.

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FOR IMMEDIATE RELEASE

NATURAL DYEING

Are you interested in dyeing fabrics? Have you ever tried natural dyes?

According to Jan Warren, Alberta Agriculture's assistant district home economist at Stettler, this is the time to gather plant materials for natural dyes which, she says, give earth-tones that are difficult to duplicate in commercial dyes.

She recommends using a mordant when using natural dyes. A mordant is a chemical solution which makes the dye take to the fabric and makes it colorfast. Different mordants also produce different colors. The most commonly used mordant, alum, gives bright colors when used with tartaric acid (cream of tartar). The tartaric acid also softens and preserves the fibre texture. Crome mordants give rich warm colors; iron mordants reduce the brightness of colors; tin mordants brighten colors, but are hard on fibres,and copper mordants cool colors down and even them out.

A standard formula for an alum mordant is:

4 ounces or less of alum

1 ounce of cream of tartar

3 to 4 gallons of soft water

(for one pound of dry material – e.g. wool–to be dyed)

Ms. Warren says you can use the roots, bark, leaves, flowers, pods and fruits of many plants to make natural dyes. However, the color of plant material you use is not necessarily the color of the dye you will get, and the amount and intensity of the dye will be influenced by the age of the plant and the amount of moisture it received while growing. This means you should dye everything you intend to dye with a particular color at one time. "Your chances of getting a matching lot are very slim indeed," says Ms. Warren.

A large amount of plant material is needed to make a dye bath, and you may have to crush or chop the "dye-plants". The next stage is to let the material soak overnight in

-(cont'd)-

Natural Dyeing (cont'd)

water. The following day boil and strain the solution to remove all the plant material.

Ms. Warren recommends the following procedure for dyeing natural fibres such as wool. Most synthetic fabrics do not dye well.

Put the fabric (clean and wet) into a mordant bath. Heat the water to simmering, and hold it there for an hour. Remove the container from the heat and allow the fabric tc cool in the mordant. Then add enough dye extract to warm water to give the water a deep, rich color. Transfer the fabric from the mordant bath to the dye bath and simmer for half an hour. Rinse the fabric in slightly cooler water until the water comes away clear. Then hang the fabric in a shady place to dry.

The following plants, commonly found in Alberta, will give you the colors shown below when used with an alum mordant.

Asters — purple and pink flowers — yellow

Zinnias — flowers — yellow

Marigolds — flowers — deep yellow-green

Lily of the valley — leaves — pale yellow

Dandelion — flowers — yellow

Onion skins — yellow to gold

Sphagnum moss — lemon yellow

Beets — roots and leaves — rose pink

Black currant berries and elderberries — pink

Spinach leaves (use only two ounces of alum) — green

Irises — bearded purple flowers — blue

Blueberries — bluish-purple

Red cabbage — bluish-purple

-(cont'd)-

Natural Dyeing (cont'd)

Rhubarb — skin from stalks — fawn

Willow bark — rosy tan

Coffee — brown

Tea (do not use a mordant) — rose tan

Ms. Warren says in natural dyeing you can dye one color over another and experiment with different plants and mordants. "This," she says, "is one area where success can overcome mistakes because you just keep experimenting!"

END!

August 1, 1977

FOR IMMEDIATE RELEASE

AGRICULTURAL DEVELOPMENT CORPORATION LOANS OFFICERS HIRED

The chairman of the Agricultural Development Corporation's (ADC) board of directors, Lorne G. Ordze, has announced the hiring of Trevor R. Davies and Garry J. Kitz as loans officers for Camrose and Vegreville respectively.

Their main responsibilities will be to consult with primary producers, to inform them of the sources of financing that are available to them, and to advise them on the financial structure most appropriate for their specific operation. The loans officers will also act as a liason with lenders and local organizations to help them interpret ADC programs. All applications for assistance from the ADC will be analyzed by the loans officers and then forwarded to the head office in Camrose.

Mr. Davies was raised on a mixed farm in the Ponoka area. He completed several years at the University of Alberta before taking employment with the Niagara Finance Company. During the four years he was with the company,he was posted to different branches in Alberta and Saskatchewan. Mr. Davies was branch manager at Camrose when he returned to the University of Alberta. He graduated with a B of C in April of this year.

Mr. Kitz was born and raised on a mixed farm near Innisfree. While attending the university, he spent his summers helping his father on the family farm and working as a farm credit advisor with the Farm Credit Corporation. While in this job he gave advice on loan proposals and loan administration. Mr. Kitz obtained his B. Sc. (agricultural economics) from the University of Alberta in April of this year.

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August 8, 1977

FOR IMMEDIATE RELEASE

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FOR IMMEDIATE RELEASE

CHECK CATTLE HERDS REGULARLY DURING THE BREEDING SEASON

Alberta Agriculture's extension veterinarian, Dr. Frank Baker, strongly advises cattlemen to check beef herds on summer pasture regularly, and to pay particular attention to the breeding bulls.

He points out that many things can happen to restrict or completely destroy the breeding ability of a bull that only a few weeks earlier was an active, capable breeder. A common injury that often goes unnoticed, until weeks of valuable breeding time have been lost, is a broken penis.

"Soon after the injury occurs," says Dr. Baker, "a large swelling can be seen along the animal's belly, midway between the scrotum and the prepuce." Of course the bull is useless for breeding for the remainder of the season and usually for life. However, in the case of a valuable animal, surgery may sometimes be a worthwhile risk.

Dr. Baker stresses that the most important thing is to spot the injury as soon after it has happened as possible, and if necessary, to replace the bull immediately with a sound substitute.

In areas where the cattle range over vast, hilly terrain, Dr. Baker says it may sometimes be necessary to check the herd every day to break up groups of bulls or cows that are fighting or bulling in one area to the detriment of the needs of the rest of the herd, located in other areas.

He also points out that footrot and pinkeye, both common diseases, can greatly reduce the conception rate of a breeding herd on summer pasture unless quickly remedied.

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August 8, 1977

FOR IMMEDIATE RELEASE

FEED AND FORAGE EXCHANGE TO HANDLE PASTURE RENTALS

At the request of Alberta's minister of agriculture, Marvin Moore, the Feed and Forage Exchange is now handling pasture rentals in addition to hay and feed grains.

George Davision of the Alberta Grain Commission says the exchange will help to arrange pasture rentals for the remainder of this season in an attempt to alleviate the pasture shortage that has developed in east-central and southern Alberta as a result of the drought. He asks farmers in other parts of the province who have surplus pasture to list it with the exchange as soon as possible.

A farmer who wants to rent pasture should contact the exchange or his district agriculturist and give details of his requirements. The secretary of the exchange will then try to put him in touch with a farmer who has that type and size of pasture available.

The Feed and Forage Exchange telephone numbers in the various regions of the province are as follows:

Calgary	261-6479	Lethbridge	328-7721
Medicine Hat	527-7555	Red Deer	343-5303
Edmonton	427-7331	Vermilion	853-5313
Grande Prairie	532-1426	Fairview	835-2228

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FOR IMMEDIATE RELEASE

BEWARE OF GRAIN BEETLES

The prevention of beetle and other insect infestations, and spoiled grain, should start before the grain is harvested.

Alberta Agriculture's entomologist and pest control specialist, Michael Dolinski, urges farmers to take precautions now to prevent costly insect infestations this winter in their stored grain. "These precautions," he says, "are particularly important for grain growers south of Lethbridge, where wide-spread grain-beetle infestations occurred last winter. Chances are there are beetles in many empty and partially empty bins and even in bins that were fumigated early last spring." The beetles are usually found in cracks and among the sweepings inside the bin and spilt grain outside.

Grain beetles move from one location to another during warm weather. They then lay eggs and start a new infestation. "It can take only one beetle-infested bin to start infestations in bins for several miles around," says Mr. Dolinski.

He points out that, in addition to destroying grain in the bin, by causing it to heat, grain beetles make grain unsalable. "It is against the law," he says, "to deliver beetle-infested grain to an elevator."

Following is a list of the precautions that should be taken every year to prevent beetle infestations. According to Mr. Dolinski, most of the owners of the infested grain he inspected last winter had not taken these precautions.

.Clean, repair and waterproof empty bins and burn or bury infested sweepings.

. Remove waste grain that has accumulated inside or outside bins.

. Spray the walls and floor of empty bins with one per cent Malathion, 0.1 per cent of Pyrethrin or one per cent Bromophos.

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Beware of Grain Beetles (cont'd)

. Harvest the grain as dry as possible. Insects, mites and molds increase rapidly in tough grain.

. Never bin new grain in a bin that contains old grain.

. Fill bin only to top plates to allow the heat and moisture that normally develops to dissipate.

. Examine grain every two weeks by pushing your hand under the surface at various points to see if it is warm and crusted. If you suspect a problem, insert a metal rod into the grain at various depths to test for warmth and crusting.

Mr. Dolinski says farmers who had a serious beetle problem last year, and those who plan to store their grain for a year or more in an area that was heavily infested last year, might be wise to treat their grain as it is being augered into the bin with Malathion (liquid or dust). It can be obtained from Oliver Industries Ltd. in Lethbridge, Calgary or Edmonton and from Kem-san in Edmonton.

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FOR IMMEDIATE RELEASE

TRACTION AIDS FOR SWATHERS AND COMBINES

There are a number of traction aids a farmer can use when his fields are too wet to support a swather or combine. They include multiple wheels, high floatation tires, chains and various designs of floatation tracks.

Duane Wood, Alberta Agriculture's regional engineer at Fairview, says when multiple wheels are used, it is important to incorporate a wide spacer between the wheels (to separate them) so that the mud will fall between the wheels rather than building up on the tires.

If floatation tires are used on a swather or combine, the drive-axle housing should be extended outwards towards the centre of the wheel to reduce the bending force on the axle.

According to Mr. Wood, tire chains with a minor modification also help when fields are muddy. Lengths of chain are attached at an angle to the sides of normal chains and left loose. As the wheels turn, the loose chains help loosen the mud build-up on the tires.

Alberta Agriculture's engineering services branch has designed a floatation track attachment that enables a combine to operate in wet soil that would otherwise be impossible to negotiate. The tracks are relatively simple in design and are attached to the combine frame with clamps. A relatively simple design is important because there are fewer parts for the mud to build up on.

Basically, the track system consists of a piece of track and one or two boogie wheels which, in the case of one wheel, are attached behind the combine's drive wheels. When two boogie wheels are used, they are attached behind and in front of the drive wheels.

Mr. Wood points out that the suspension should include a means of tightening the track as well as allowing for some give-and-take in the boogie wheel carriage system. He says a two-boogie system works best on combines. The front and rear boogies are

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Traction Aids for Swathers and Combines (cont'd)

positioned three to four inches above the ground so that the track is laid on the ground for the drive wheels to run on. In cases where there is not enough room for a front boogie, a machine that stalls in the mud can be driven backwards.

Since floatation tracks are not manufactured commercially, the engineers have compiled a bulletin which tells exactly how to make the track, and how to attach the wheels to the combine. The explanation includes a detailed plan and a picture of the drive wheel of a combine which has been fitted with a floatation track.

Copies of the bulletin, entitled "Combine Tracks for Floatation Purposes" are available from Alberta Agriculture's publications office, located in the Agriculture Building.

Further information on the floatation tracks and information on adapting them for use on swathers can be obtained from John Kienholz, Engineering and Home Design Group, Agriculture Building, 9718-107 Street, Edmonton, Alberta, T5K 2C8 (Telephone 427-2184) or Duane Wood, Engineering Field Services Branch, Provincial Building, Fairview, T0H 1L0 (Telephone 835-2291).

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August 8, 1977

FOR IMMEDIATE RELEASE

HARVESTING CUSTOM RATES

Are you planning to do custom work during the coming harvesting season, or to have some custom work done? If so, you will find the publication "Farm Machinery Costs as a Guide to Custom Rates" very useful for determining and evaluating rates.

Compiled by Alberta Agriculture's farm business management branch, it was published early this year. Although some of the machinery prices quoted may have changed somewhat, the principles and the basic information are still relevant.

The publication contains a section for the full-time custom operator, one for the farmer who is approached by neighbors to do a limited amount of custom work and one for the farmer who does custom work after he has completed his own harvesting operations.

It provides a breakdown of fixed and variable costs, based on November, 1976, costs for harvesting and other commonly used farm implements, and is intended primarily as a guide to machinery decisions. Because of the variability of costs from one farm to another, work sheets have been included for calculating machinery costs that reflect individual situations. A thorough knowledge of these costs will be very helpful for making decisions on such things as what to charge for custom work, when to trade in an old tractor and whether leasing or custom hiring would be more profitable than buying a new machine.

Anyone who would like to have the results of a survey on what custom operators have been charging can obtain them from the Farm Management Branch, Alberta Agriculture, Provincial Building, 5030-50 Street, Olds. The mailing address is Box 2000, Olds, T0M 1P0.

Copies of "Farm Machinery Costs as a Guide to Custom Rates" can be obtained from district agriculturists and the publications office, Agriculture Building, 9718-107 Street, Edmonton, T5K 2C8.

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FOR IMMEDIATE RELEASE

AGRICULTURAL ENGINEERING TECHNOLOGY COURSE

Applications are now being accepted for the two-year agricultural engineering technicians' course which commences at Olds College in early September.

Set up under the guidance of a special industry-oriented advisory committee, the course is designed to fill the demand for technicians and technologists who are capable of applying engineering to agricultural projects.

Students who enroll in this course can specialize in any study area of their choice within the fields of power and machinery, agricultural buildings, materials handling and processing, irrigation and drainage. Part of their training will entail working for industry in their specific study area.

Graduates of the course should have no trouble getting jobs with machinery companies, irrigation companies, farmstead building and equipment companies and materials handling equipment companies.

Students in the first class of engineering technicians,which started last September, have had no problems finding summer jobs related to their course work. In fact, the number of jobs offered considerably exceeded the number of students seeking jobs.

Anyone interested in the agricultural engineering technology course should contact the agricultural mechanics department at Olds College as soon as possible because 24 is the maximum number of students that can be accommodated. The address is Olds College, Olds, Alberta. (Telephone number 226-8281).

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FOR IMMEDIATE RELEASE

1977 ALBERTA ACHIEVEMENT AWARDS PROGRAM

September 2 is the deadline for submitting names to be considered under Alberta's 1977 Achievement Awards Program.

This program is the only comprehensive provincial awards program of its kind in Canada. Initiated to provide recognition for Albertans who have made an outstanding contribution in a variety of areas, including agriculture, it has now been in continuous operation for 10 years.

Do you know a person or a group connected with agriculture who has made an exceptional contribution that is worthy of recognition. If so perhaps he or she or the group may fit into one of the following categories.

Service awards are given to individuals or groups who have provided outstanding voluntary service, usually over a period of 10 years or more, which has had a wide regional or provincial impact.

Excellence awards are given to individuals or groups for exceptional contributions and/or achievements in a professional/occupational capacity at the provincial, national or international level.

If you know a person or group that would fit into either of these categories, those in charge of the program would appreciate your sending in a nomination form.

You can obtain further information on the program and nomination forms from The Achievement Awards Program, Alberta Culture, 14th Floor, CN Tower, Edmonton, T5J 0K5.

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August 8, 1977

FOR IMMEDIATE RELEASE

1977 ALBERTA HORSE IMPROVEMENT PROGRAM

The deadline for entries in the 1977 Alberta Horse Improvement Program is August 31.

Scheduled to take place at Spruce Meadows, Calgary, on September 10 and 11, the objectives of the program are to identify and advertise the superior horses, breeders and trainers in the province, and to establish better markets for Alberta-bred horses. It will be conducted by Alberta Agriculture's horse industry branch in conjunction with a horse improvement committee consisting of representatives from the participating breed associations.

The Alberta Horse Improvement Program is in the form of a special show to which the public is invited. Each entry will be evaluated by two highly qualified judges and an equine veterinarian. Evaluation criteria for the young horses will be based on conformation as it relates to athletic ability, while the mature horses will be evaluated on both conformation and performance. There will be classes for horses of various ages and sexes within each of the following breeds: Appaloosa, Arabian, Morgan, Percheron, Quarter Horse, American Saddlebred and Welsh Pony.

Any Albertan who owns an Alberta-bred horse that is registered with one of the participating breed associations, and which has a negative Coggin's test, may participate in the program. Prize money of up to $1,500 per class can be won.

Further information on the Alberta Horse Improvement Program and entry forms can be obtained from the Horse Industry Branch, 2003 McKnight Blvd. N. E., Calgary, T2E 6L2 (Telephone 276-7775).

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August 8, 1977

FOR IMMEDIATE RELEASE

FARM BUSINESS MANAGEMENT BRANCH MOVES TO OLDS

Marvin Moore, Alberta's minister of agriculture, has announced the relocation of the farm business management branch to Olds. The move is part of the government's decentralization program.

The branch provides research findings and information on farm business management for Alberta farmers. Information is available on farm planning, records and analysis and financial management from the branch's three sections.

Staff is located in the new Provincial Building, 5030-50 Street, Olds. The mailing address is Box 2000, Olds, T0M 1P0, and branch staff can be reached at 226-8305.

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August 8, 1977

FOR IMMEDIATE RELEASE

INTERNATIONAL MARKETING APPOINTMENT

H. B. McEwen, assistant deputy minister with Alberta Agriculture, has announced the appointment of Barry D. Mehr to the position of trade director in the international marketing group.

Mr. Mehr will assist Alberta's agricultural commodity and processed food suppliers and feed product suppliers with their exports to the United States. Emphasis will be placed on sales to the Pacific Northwest region.

Mr. Mehr has a degree in food science from the University of Toronto. From 1963 to 1973 he worked with the Swift Canadian Company as district sales unit manager, general sales manager and assistant general beef manager.

For the past four years he has been employed by Agriculture Canada. His most recent position was head of market development in the federal economics branch.

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FOR IMMEDIATE RELEASE

MAKING JELLY

by Betty Birch
Alberta Agriculture's
District Home Economist
at Stettler

What could be more delicious than bright, clear, delicately-flavored jelly on fresh bread? If you have an abundance of fresh fruit, why not try your hand at making jelly this year?

The secret of making jelly is to make it in small batches using about 3 or 4 cups of juice at a time. Doubling recipes is not recommended. It often results in jelly that is too soft or too stiff. The best jelly is 'tender', but firm enough to hold its shape when cut.

The essential ingredients for making jelly are fruit juice, sugar, pectin and acid. Different kinds of fruits contain different amounts of pectin and acid. Fruits rich in pectin and acid are crabapples, sour apples, cranberries, currants, gooseberries, sour plums and grapes. Fruits rich in pectin, but low in acid, are quinces and sweet apples. (To these, you could add lemon juice to increase the acidity.)

Fruits rich in acid but low in pectin are strawberries, cherries, rhubarb, pineapple, raspberries and loganberries. These fruits may need to have commercial pectin added to make good jelly. Peaches, pears and blueberries are low in both pectin and acid.

Overripe fruit is also usualy low in pectin and acid. For good jelly, it's best to use a mixture of ripe and slightly under-ripe fruit. Since most pectin is found in the peel, core and seeds of fruit, just wash the fruit well and use the entire fruit to make juice for the jelly.

The amount of sugar required to make jelly depends upon the amount of pectin. Fruits high in pectin (or with added pectin) require more sugar than fruit low in pectin. High pectin mixtures need about ¾ of a cup of sugar per cup of juice. Jellies made without added pectin need only about ½ cup of sugar per cup of juice.

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Making Jelly (cont'd)

To make juice, simmer the fruit and water (enough to cover, or almost cover, the fruit) and crush the fruit. Cook it until it is mushy. Pour the hot, cooked fruit into a moistened jelly bag made of several thicknesses of cheesecloth. Hang the bag over a bowl. Do not squeeze it or you will get cloudy juice.

If you are not adding commercial pectin, you can test the juice for pectin by boiling it for 3 minutes. Combine one teaspoonful of the juice and one teaspoonful of rubbing alcohol — mix them together and let them stand for 30 seconds. If a jelly-like mass or clot is formed, the juice contains sufficient pectin. Sugar may then be added. If a heavy clot does not form, continue boiling the juice until the pectin test is satisfactory, or you may have to use a commercial pectin.

The next step is to add the sugar (remember to use more if you add pectin) and then boil the syrup briskly in an uncovered pan. Remove the scum as it forms.

To determine when the jelly is done, dip a metal spoon into the boiling syrup. It will run off the side of the spoon in drops. When the drops run together and slide off in a 'sheet', the jelly is finished.

Carefully pour the jelly into hot sterilized glasses, leaving a space at the top of about a quarter of an inch. Let the jelly stand until pit is artially set, then pour a thin layer of paraffin on top to completely cover the jelly. Let it harden, and add a second thin layer to ensure a perfect seal. If you put a little piece of string, or the top of a pop can, in between the two layers of was, leaving a piece sticking out, you will have a handle to remove the wax when you want to use the jelly.

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August 15, 1977

FOR IMMEDIATE RELEASE

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Alberta
AGRICULTURE
COMMUNICATIONS
Phone (403) 427-2127

August 15, 1977

FOR IMMEDIATE RELEASE

FIELD DAY

Alberta Horticultural Research Center
Brooks, Alberta
(located 3 miles east of Brooks on Highway 1)

DATE: Friday, August 26, 1977
TIME: 9:00 A.M. – 4:00 P.M.
FIELD DAY THEME: STRAWBERRIES

A MULTITUDE OF EVENTS OF INTEREST TO EVERYONE

TOURS
- Greenhouses
- Fruits
- Ornamentals
- Vegetables
- Special Crops

FOOD
- Lunch: 11:30 A.M. – 1:30 P.M.
- Bring Your Own Picnic Lunch
- Fresh Corn And Refreshments Provided

PLANT PEST CLINIC (Diseases, Insects, Weeds)
- Specialists Will Diagnose And Discuss Your Plant Problems

EXHIBITS
- Fruits (FEATURING STRAWBERRIES)
- Greenhouse Crops
- Market Gardening
- Vegetables
- Special Crops

DEMONSTRATIONS
- Pruning Techniques
- Flower Arranging

SPECIAL DISPLAYS AND DISCUSSIONS
- Strawberry Production And Utilization
- District Agriculturists And Home Economists
- Irrigation Specialists

See You There!

Alberta
AGRICULTURE

Phone (403) 427-2127

August 11, 1977

FOR IMMEDIATE RELEASE

GOOD QUALITY STRAW FOR FEED

If you are planning to feed straw as the main constituent of your beef cow rations this winter, here are some suggestions on how to maximize its quality from Ron Weisenburger, regional livestock specialist with Alberta Agriculture.

First of all, he says, oat straw usually makes better feed than barley straw, and both oat and barley straw make better feed than wheat straw. He recommends cutting crops from which the straw is going to be used for feed as soon as is practical from the point of view of grain production. "Don't wait," he says, "until the grain is dead ripe. Early cutting increases the amount of leafy material which can be saved."

Since leaves are much higher in digestible energy and protein than stems, the feed value will be considerably higher in straw which has retained some of its leaves. Also, the stem portion of the straw will make better feed if it is cut on the greenside. This is especially true of oat straw.

If you think you will not need all your straw for feed, Mr. Weisenburger suggests that you use the straw from the lower, greener areas of your fields. In this way, you will save the best straw for feed, and, at the same time, leave straw on those parts of the fields which need it for added fibre.

Since chaff usually makes better feed than straw, you may find it worth your while to use a commercial chaff gathering machine behind your combine. You can also save a considerable portion of the chaff and leafy material that clings to the stems of the straw as it leaves the combine if you bale or chop the straw as soon as possible after it has been combined. Much of this nutritious material is lost as the straw settles into the stubble after a couple of days. The sun's bleaching action also has a detrimental affect on the feeding value of straw that is left lying in the field for several days.

Mr. Weisenburger strongly recommends stacking straw as soon after it has been baled as possible. He points out that rain does much more damage to the quality of straw than it does to the quality of cut hay.

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Good Quality Straw for Feed (cont'd)

After you have finished harvesting, you would be wise to send samples of all the different types of straw you are planning to feed to the Alberta Soil and Feed Testing Laboratory in Edmonton for an analysis. "It is more important," says Mr. Weisenburger, "to know the quality of the straw you will be feeding than it is to know the quality of the supplemental grain you will be feeding."

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August 15, 1977

FOR IMMEDIATE RELEASE

DANGER OF VITAMIN A DEFICIENCY IN DROUGHT AREAS OF THE PROVINCE

Alberta Agriculture's extension veterinarian, Dr. Frank Baker, says there is a great danger of cattle in drought areas of the province suffering from a vitamin A deficiency.

He points out that there is no available vitamin A in brown grass, which means that cattle on such pastures must draw on their body reserves unless they are given supplemental vitamin A. According to Dr. Baker, the length of time these body reserves will last varies with the individual, but young animals are affected much sooner than older ones.

A vitamin A deficiency in bulls can result in decreased breeding efficiency, and in cows it can result in lowered conception rates. Abortions may occur later in those animals that do conceive. Calves are particularly susceptible to vitamin A deficiency.

Dr. Baker strongly advises cattlemen to check now with their veterinarian, animal nutritionist or district agriculturist regarding vitamin supplementation and other nutritional requirements in their herds.

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August 15, 1977

FOR IMMEDIATE RELEASE

ESTRUS SYNCHRONIZATION PRODUCTS

Estrus synchronization products for use on beef cows should be available in about a year, according to Dr. Kay Henderson, reproductive physiologist with Alberta Agriculture.

"Their purpose," she explains, "is to cause most of the cows in a herd to ovulate within one or two days of each other. These products do not affect the fertility level of the cows."

There are two types of estrus synchronization products. In the first groups are prostaglandin and related substances. They usually require two injections at 11 to 12 days apart. They work only on animals that are already cycling. The other type of product is a progestin implant combined with an estrogen injection. It may work on some animals which are about to cycle.

Dr. Henderson reports that the manager of an Angus cow-calf operation in south Dakota who used synchronization treatment on his 300-cow herd achieved 85 per cent synchronization. Pregnancy tests showed that 65 per cent of the animals had conceived to the first artificial insemination (A.I.) service.

Dr. Henderson points out that estrus synchronization products will be invaluable to beef cow-calf operators who want to take advantage of the superior gene pool available through the use of A.I. Without synchronization, A.I. is not practical in many herds because estrus detection is not feasible on an individual basis. Another advantage of estrus synchronization is a considerably shortened calving season.

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August 15, 1977

FOR IMMEDIATE RELEASE

TREAT FALL RYE

Alberta Agriculture's plant pathologist, Dr. Jack Horricks, urges farmers to treat their fall rye for seed decay and seedling blight,and for stem smut if they live in the southern part of the province.

There are numerous products on the market which contain maneb that can be used for controlling seed decay and seedling blight, but only Vitaflo-280 and Vitavax Powder (formerly called Vitaflo D.B.) will control stem smut. These two fungicides will also control seed decay and seedling blight, both of which markedly decrease seedling emergence.

Plants affected with stem smut, which has been causing increasing concern in southern Alberta during the last few years, develop masses of black smut spores on the upper part of the stems. The disease extends into the heads, which also become blackened with smut spores and yield no grain. In fact, the heads of infected plants often fail to emerge from the boot stage and are usually bent or otherwise deformed. The stems are much shorter than healthy stems. Although the disease can be detected as soon as the crop begins to head out, it does not become conspicuous until after the crop has started to ripen.

Plant pathologists at the federal research station at Lethbridge have found that the liquid-suspension fungicide, Vitaflo-280, and the drill-box formulation, Vitavax Powder, provide good control of stem smut when used at rates of 1.75 fluid ounces per bushel and 1.5 ounces per bushel,respectively.

The Lethbridge studies also showed that both fungicides will control stem smut spores in the soil as well as on the seed. This is an important factor since stem smut spores can survive in the dry soils of southern Alberta from one crop to another, even with an intervening fallow year. Thus disease-free seed can produce an infected crop if sown in contaminated soil unless it has been treated with one of the recommended fungicides.

-(cont'd)-

Treat Fall Rye (cont'd)

The federal plant pathologists also found that the most widely-grown rye variety in Alberta, Cougar, is much more susceptible to stem smut than other recommended varieties. However, none of them are immune to the disease.

Although some rye growers treated their seed last fall with Vitaflo-280 or Vitavax Powder, many continued to use untreated seed, with the result that a survey, conducted earlier this year, showed that over half the rye crops in southern Alberta were infected with stem smut. In some crops 10 to 15 per cent of the plants were affected. Of those growers who did treat their seed, some inadvertently used fungicides that were either not registered for use on rye (e.g. Busan-30) or were registered only for controlling seed decay and seedling blight. Vitaflo-280 and Vitavax Powder are the only products registered at the present time for controlling stem smut in fall rye although other products are being evaluated.

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August 15, 1977

FOR IMMEDIATE RELEASE

CHECK FOR GRAIN BEETLE INFESTATIONS

Alberta farmers who have grain in their bins that was harvested this summer, or carried over from last year, should be checking for grain beetles.

This advice comes from Alberta Agriculture's entomologist and pest control specialist, Michael Dolinski, who says that stored grain should always be checked, but that checking is doubly important this year in view of the serious infestations in the southern part of the province last winter. This, plus the possibility of a longer than normal storage period for some of this year's grain, means that farmers who want to be on the safe side should check their grain about every two weeks until it is fed or sold.

"Anyone who delivers insect-infested grain to an elevator will have it rejected and will be forced to take it home and fumigate it," says Mr. Dolinski. Apart from being unsalable, insect-infested grain can heat and be destroyed by a combination of insects and fungi.

Mr. Dolinski points out that it is cheaper to fumigate grain that is infested with insects now rather than to wait until later in the season. It takes less fumigant to control the insects, and it is a lot easier to fumigate,at this time of year than under winter weather conditions. All fumigants have temperature restrictions below which they will not work.

Description of Beetles

There are two main types of beetles involved in infested grain problems in Alberta. They are the rusty grain beetle and the red flour beetle. Rusty grain beetles are reddish-brown, about one-twelfth of an inch long and have a flat back and fairly long, slim antennae. They are cold-hardy, and can survive in non-heating bins.

Rusty Grain Beetle

-(cont'd)-

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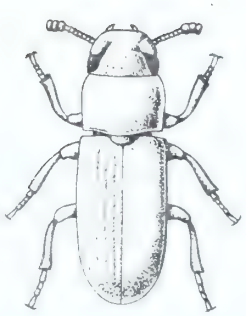
Check for Grain Beetle Infestations (cont'd)



Red Flour Beetle

Red flour beetles are also reddish-brown, about one-sixth of an inch long and have rounded backs and short, stubby antennae. They are not cold-hardy and cannot survive in grain when the temperature falls below 4°C.

Detection

There are two methods of checking for grain beetles. One is to take samples of grain from the surface with your hands and from lower levels with a probe. Probes can be borrowed from most elevator agents. Screen the samples with a sieve that has large enough holes to let the beetles fall through. It is easier to see them if you place a piece of white paper under the sieve and use a magnifying glass. In the winter you should warm the screening to room temperature. The beetles are more easily seen when they warm up and start moving around.

The second method of detection entails the use of an insect trap which you can make out of a piece of pipe. Close off one end, and drill holes the full length of the pipe. The holes should be large enough for the insects to pass through, but too small to allow the entry of grain kernals. Open the closed end of the pipe (which should extend to the bottom of the bin) about every two weeks to see how many beetles are in it. You can also use the pipe to check for heating in the grain. The more traps in a bin, the more chance you have of detecting an infestation.

Commercial insect traps are available, at a price of $19.75 each, from Gen Manufacturing Limited, Box 560 Coaldale. They can be attached to the end of a long pipe and inserted into the grain.

Since there can be a large population of larvae in grain with very few adult beetles present, Mr. Dolinski recommends checking for larvae as well. This can be done by putting samples of grain on a screen, placed over a collecting container, and hanging a light bulb close to the surface of the grain. If there are any larvae, the heat from the light bulb

Check for Grain Beetle Infestations (cont'd)

will drive them, and any adults that may be present, through the screen into the recepticle below.

Control

There are solid and liquid fumigants which can be used for treating infested grain. The solid fumigant, Phostoxin, comes in tablets which can be put into grain that has been removed from the bin to break up hot spots (as it is being augered), providing the temperature of the grain is above 5° C. The tablets can also be dropped down a one-inch pipe that has been inserted in the binned grain. The pipe should come to within eight feet of the bottom of the bin. As you pull the pipe out of the grain, drop the tablets down each time it moves up two or three inches. The recommended rate for treating grain with Phostoxin is 150 tablets per 1,000 bushels of grain, but not more than 10 tablets should be dropped in the pipe at one level. If the pipe is placed in the centre, 150 tablets per 1,000 bushels should be enough to treat the grain in a bin with a 20-foot diameter. The more evenly the tablets are distributed throughout the grain, the better the results will be.

Liquid fumigants should only be used as a last resort because they are very toxic. They can be sprayed on the grain surface from outside the bin or poured down a pipe that runs from the surface of the grain to the bottom of the bin.

The effectiveness of these products cannot be guaranteed when the grain temperature is below 15°C. Application rates range from two to four gallons per 1,000 bushels, depending upon bin construction and the temperature of the grain.

The best method of controlling heating grain in the winter is to move it from one bin to another or on to a tarpaulin on the ground. A fumigant may not completely eliminate the heating problem, if the grain contains actively growing fungi as well as beetles. Recent research has shown that cooling the grain to -6°C. will kill all growth stages in both the rusty grain and red flour beetles. If it is not possible to cool the grain to -6°C., you can treat the grain when augering it back into the bin with Cythion (a special formulation of malathion)

Check for Grain Beetle Infestations (cont'd)

to kill any remaining beetles.

Mr. Dolinski says Cythion and liquid fumigants can be obtained from such outlets as Oliver Industrial Supply Ltd. in Edmonton, Calgary and Lethbridge and from Kem-San Ltd. in Edmonton. Solid fumigants are available through Alberta Wheat Pool elevators.

Precautions

Great care must be taken during the transportation, application (follow label directions) and storage of fumigants because they are the most toxic of all pesticides. You should always wear a full-face gas mask which has a self-contained air supply or an appropriate filter when using any fumigant. Always have somebody with you and attach a rope to your waist so that you can be pulled out of the bin if necessary. After you have fumigated a bin, nail or lock it up, close ventillators and post a warning sign on the door. Do not enter the bin until the odor has completely disappeared – this can take six weeks or longer.

Symptoms of fumigant poisoning are dizziness, blurred vision, vomiting and abdominal pains. Anyone who shows these symptoms should be exposed to fresh air, and a doctor should be called immediately.

Further information on products and methods can be obtained from your agricultural fieldman or district agriculturist.

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August 15, 1977

FOR IMMEDIATE RELEASE

GRAIN FUTURES

Although every farmer knows that one productive input can be substituted for another, it is not as generally known that the use of a product in one time period can be substituted for the use of the same product in another time period.

If, for example a rapeseed crusher feels that rapeseed for immediate delivery is too expensive, he may decide to defer his purchase until later. The result will be that the price for immediate delivery will fall. According to Lynn Malmberg of Alberta Agriculture's market analysis branch, this type of behaviour is typical of a well-organized futures market.

A further example may serve to clarify the situation. On May 10, Chicago soybeans for delivery in July (the July future) were trading at $9.32 per bushel, and at $7.10 or $2.20 less for November delivery. However, by July 5, the July future for soybeans was trading at $7.01 per bushel and the November future at $6.26 per bushel, a difference of only 75¢. "The main reason for the narrower spread between the July and November futures," says Mr. Malmberg, "was that buyers found it profitable to defer their soybean purchases from July to later in the year, with the result that prices for immediate delivery fell relative to those for deferred delivery."

Mr. Malmberg says substituting purchases in one time period for purchases in another is most important at this time of year. If existing supplies appear adequate to fill requirements until the new crop comes in, prices for current delivery will fall relative to those for deferred delivery. If, on the other hand, supplies appear to be short, the reverse will be true.

Farmers who would like to learn more about the futures market and how to use it to their advantage should contact Lynn Malmberg, Market Analysis Branch, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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August 15, 1977

FOR IMMEDIATE RELEASE

HARVESTING RAPESEED

by Andy Birch
Alberta Agriculture's
District Agriculturist
at Stettler

It is important that rapeseed be swathed at about 35 per cent moisture content. Too high a moisture will reduce the yield and lower the oil and protein content. Too low a moisture (20 per cent) increases losses from shattering.

It is a good idea to walk through the field and take several samples. Shell out the pods and mix the seed. When the seeds are at 35 per cent moisture, they should feel firm when pressed between the fingers. About 25 per cent of them will have started to change from green to brown.

The crop should be cut just below the seed pods. Leaving a maximum stubble height will help drying and make combining easier. If a swath roller is being used, it should be set high enough to anchor the swath into the stubble.

Combining Rapeseed

Rapeseed is ready for combining when the moisture content has dropped to about 10.5 per cent. Most of the seeds should be mature by then. If there are some green kernels, a few more days in the swath is probably all that is needed. However, do not wait too long. Begin combining when samples indicate less than 10.5 per cent moisture.

Concave and Cylinder Adjustments

The cylinder speed should be set between 400 - 650 rpm — about half the speed that would normally be used to harvest wheat. Concave clearance at the front should be fairly wide (about 5/8 inch) and narrow at the rear (1/8 to 1/4 inch).

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Harvesting Rapeseed (cont'd)

Wind Adjustment

Since rapeseed blows easily, wind velocity should be kept to a minimum. It is better to shake the seed out of the chaff than to blow the chaff out of the seed. Open the fan shutters and reduce the fan speed.

Shoe and Sieve Adjustments

The top sieve or chaffer should be open enough (1/4 - 1/3) to allow the air to lift the chaff with a shaking action as it is conveyed along the sieve. The extension chaffer should be raised slightly (5 - 10 degrees) at the rear and be opened sufficiently to allow unthreashed pods to pass through into the return.

Storage

Although 10.5 per cent is considered a safe moisture content for storing clean, cool rapeseed, it is possible that some of the rapeseed will contain immature, green weed seeds which will raise the moisture content. In this case, the rapeseed should be dried.

A publication entitled "Rapeseed — Canada's 'Cinderella' Crop" contains a good description of the different aspects of rapeseed production. It can be obtained from district agriculturists and the publications office, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

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August 15, 1977

FOR IMMEDIATE RELEASE

4-H 60th ANNIVERSARY CELEBRATIONS

Are you a past or present member of a 4-H club or are you a friend of this organization? If so, you are invited by the 4-H Foundation of Alberta and the Alberta 4-H Advisory Council to celebrate the 60th anniversary of 4-H in Alberta at Battle Lake, 80 miles southwest or Edmonton, on September 3, 4 and 5.

The celebrations will take the form of a gigantic rally to witness the official land title transfer of 143 acres of land on Battle Lake to the 4-H club members of Alberta. An option was taken on this land last year, and a drive was started to raise the $95,000 needed to buy it. Allan Shenfield, chairman of the 4-H Foundation of Alberta, states that the fund raising drive has almost reached its goal and should have passed it by September 1, thanks to the dedication and determination of past and present 4-H members and leaders.

Initially the land will be used for 4-H wilderness camps which involve such things as canoeing, hiking, outdoor cooking, survival skills and so on. It is envisaged that when buildings and other facilities have been erected, the centre could be used for provincial and regional 4-H programs. These include club weeks, leadership training seminars, the selection of award winners, environmental conservations camps, project development workshops and the annual leadership development conference. It is possible that the centre will also be used by industry for personal and job development workshops.

Those in charge of the celebrations hope that all Albertans who are involved in 4-H work, or who have participated in the organization in the past, will bring their campers, tents, sports equipment, food, water, 4-H banners, T-shirts, cameras and 4-H spirit and join in the weekend of old-time sports activities, weiner roasts, campfires, singing and good fellowship.

The official ceremonies will commence at 2 p.m. on Sunday, September 4, when Dr. Grant MacEwan, former lieutenant governor of Alberta, and owner of the land, hands over the title to the 143 acres to Mrs. Dorothy Rigney, president of the Alberta 4-H Advisory Council.

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August 15, 1977

FOR IMMEDIATE RELEASE

ANNUAL FLOWER AND WOODY ORNAMENTAL HARDINESS TRIALS

Horticultural enthusiasts will have a chance on August 21 to see what new annual flowers, including the All American Selections, thrive in the Edmonton area,and some of the woody ornamentals that are hardy enough to grow in central Alberta.

On that date the University of Alberta's Department of Plant Science will be holding a horticultural open house at its Parkland Farm, located at approximately 70th Avenue and 116 Street in Edmonton. Weather permitting, the plots will be open for viewing from 2 p.m. to 8 p.m.

Further information on the program can be obtained from the Horticulture Office, Department of Plant Science, University of Alberta, Edmonton, T6G 2E3 (Telephone 432-4182).

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FOR IMMEDIATE RELEASE

RESPONSIBILITY
by Nadine Vester
Alberta Agriculture's Family Living Specialist

Do you want to raise your child to be responsible? "Of course," you say, "who doesn't!" Do you know that most of us defeat our own purpose with one little phrase - "You're too young to - - -?" Too young to help Mom bake - - - ," You'll make a mess." Too young to set the table - - -," You'll drop the dishes." Too young to go to the store - - -," You'll lose the money." All put-downs! Is it any wonder that, when we decide a child is no longer "too young," he is not capable of doing many of the things we would like him to do?

"But," you say "he will drop the dishes." What is more important, a responsible son or a cup in one piece? Plastic dinnerware was made for parents of small children.

When should a child start doing chores? When he wants to and that is usually around the ages of two, three or four. He wants to imitate the big people around him. Make the most of that willingness; there will never be a better time.

In sharing the job creatively, you can show him how to do the job he has volunteered to do. "Mom will set her place and you can set Dad's place." Comment specifically and positively on that part of the job that is done well so that the child knows that what he did, he can do again well. Do not say "Isn't that Mommy's good boy!" Say "My isn't that a neat table setting! The knife and fork are lined up like soldiers and the glass is right where Dad can reach it." Watch him glow with accomplishment, and offer to do more.

Are you having trouble coming up with a positive comment? One parent walked into a room scattered with toys, scratched her head for awhile, and finally spotted a bare spot on the floor. She said, "Hey, doesn't that bare spot look great!" Her children amazed her by starting to put the toys away to enlarge the bare spot she liked so much.

Is your child growling with frustration over a job he is having trouble with? It is more useful to suggest "Maybe it will work better if you do it this way," and demonstrate, than to say "You are doing that wrong." He already knows that.

"But all this takes time and energy, and I'm so busy!" Yes, but chances are, time and effort spent when a child is small will get you a lot more help when he is bigger, and he will be a happier and more competent little person. Is it not worth the gamble?

Alberta
AGRICULTURE

August 15, 1977

FOR IMMEDIATE RELEASE

PRESERVING CUT FLOWERS

Have you wondered how florists keep cut flowers looking so fresh? You can do the same thing if you follow a few simple steps recommended by Chris Campbell, horticultural specialist with Alberta Agriculture.

She advises cutting your flowers in the late afternoon, and choosing those that are just starting to open. When you bring them into the house, re-cut the stems under water and put them into hot water (43° C.) for 12 to 24 hours. In the case of flowers with woody stems (e.g. roses), split the stems three or four inches up from the bottom, and then crush them with a hammer before putting them in hot water. Chrysanthemums, lillies and hollyhocks also benefit from having their stems split and crushed. Plants with a milky or sticky sap (e.g. poppies) will usually last longer if the ends of their stems are seared with a flame or immersed for several minutes in boiling water.

"Always put your flowers into a container that is free of bacteria and fungi," says Ms. Campbell, "Wash it with hot, soapy water and rinse it thoroughly. Then fill it with tepid water. Never use cold water or you will considerably reduce the life of your flowers."

Many people use a flower preservative, available from most garden centres, to prolong the life of their flowers. Ms. Campbell says the soft drink, Sprite, is just about as effective in prolonging the life of cut flowers as a preservative. You should use about one part Sprite to five parts of water.

Finally, your flowers will last even longer if you change their water every day, re-cut their stems (not woody stems or those with a milky sap), add fresh flower preservative or Sprite and put the flowers in a cool place at night.

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August 22, 1977

FOR IMMEDIATE RELEASE

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August 22, 1977

FOR IMMEDIATE RELEASE

ARTIFICIALLY INSEMINATING SOWS

When artificial insemination (AI) for swine is mentioned, most people think that it is too much trouble and too time-consuming. However, according to Chris Evans, Alberta Agriculture's regional swine technician at Lethbridge, that is not the case.

He says it does not take any longer to inseminate a sow with fresh semen than it takes to hand breed her with a boar. He also says that conception rates with AI should be as good – 80 to 85 per cent – as those from natural breeding. It all depends upon the management skill. With superior management, conception rates could be even higher than 85 per cent. It is also very important that the semen does not suffer any sudden change in temperature.

"The main thing to remember when inseminating a sow," says Mr. Evans, "is to have fresh semen available at the right time." Estrus (heat) in a sow normally lasts for a couple of days and ovulation (sheading of the eggs) occurs at the end of this period. Mr. Evans recommends checking sows at least twice a day with a boar one or two days after they have been weaned.

The first sign of heat in a sow is the reddening and swelling of the value Often the sow will go off her feed and stay by herself. She then takes on the characteristics of the male in that she will chase and bully the other sows and will try to ride them. However, she will not allow herself to be ridden. She then comes into full heat, which means she will let the other sows ride her and let the herdsman sit on her back. During this time she will stand perfectly still.

Mr. Evans says a sow should be inseminated approximately 12 hours after the start of standing heat, and again 12 to 16 hours later. It is important that the sow be kept quiet during and after breeding.

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Artificially Inseminating Sows (cont'd)

According to Mr. Evans, the actual insemination procedure is easy. The normal equipment is a spiral-tipped rubber catheter. It should be lubricated with liquid parafin, except for the tip. To insert it into the sow, push it forward and upwards to avoid entering the bladder. Then screw the catheter counter-clockwise into the cervix.

Once the catheter is in place, it will lock into the cervix and the plastic insemination bottle, containing the diluted semen, can be fitted into the end of the catheter. Only slight pressure on the bottle is needed for the semen to flow into the sow. It will take about five minutes. Mr. Evans recommends stimulating the sow in a way similar to that done by a boar— i.e. nudging her sides or putting pressure on her back.

He stresses that it is most important that the hands of the inseminator and all the AI equipment be kept scrupulously clean, and that the insemination bottle be washed out with hot water after the semen has been used. The catheter should be boiled for five minutes. Never use a detergent when cleaning either the bottle or the cathether.

Advantages of using AI for swine, according to Mr. Evans, are:

- A tighter control on disease while introducing new blood lines.
- The use of top quality ROP tested boars in a larger number of herds.
- A better planned cross-breeding program.
- Facilitates batch farrowing.
- More sows can be served by the same sire — i.e. upwards of 15 sows can be served from one AI collection.

August 22, 1977

FOR IMMEDIATE RELEASE

TRICKLE IRRIGATION

Trickle irrigation, also known as drip or daily flow irrigation, is a relatively new method of applying water to field and garden crops.

In an attempt to evaluate the advantages of this type of irrigation,and to determine those systems which appear to be most beneficial, the conservation and development branch of Alberta Agriculture's irrigation division commenced field investigations in 1972. Some projects have been completed, while others are still in progress.

Hydraulic Testing of Trickle Irrigation Systems

This is an on-going project in which 12 trickle irrigation systems are being tested for pressure loss, discharge uniformity and operational characteristics. Irrigation systems specialist, Larry Spiess, reports that four systems have been found to be unsatisfactory in one or more of the above areas. "With the remainder," he says, "we have determined the engineering features peculiar to the individual system, and, therefore, the probable best uses in the field." It has also been found that discharge and uniformity figures for most of the systems vary considerably from the manufacturers' tables and charts.

Trickle and Furrow Irrigation

When four types of trickle irrigation systems were compared with a gated-pipe furrow system for irrigating carrots, cucumbers, tomatoes and strawberries over a three-year period, the water saving from the trickle systems averaged from 66 to 79 per cent. Marketable yield for the trickle systems averaged 15, 25 and 60 per cent higher than for the furrow system for tomatoes, cucumbers and carrots respectively. It was also found that the porous tubing worked very satisfactorily when buried two to four inches below the soil surface, but that it sustained considerable mechanical and ultraviolet damage when used on the surface. Two other double-walled types of tubing were found to work satisfactorily both below and above the ground.

Trickle Irrigation for Trees and Shrubs

This project is being carried out to determine whether a portion of the root zone in a highly saline soil can be maintained in a state that is conducive to the growth of fruit and orna-

- (cont'd) -

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Trickle Irrigation (cont'd)

mental trees. Soil analysis has shown that a portion of the root zone near the plants sustained considerable salt leaching. At the end of the third year of this project, 74 per cent of 210 plants, representing 42 varieties, had survived. The rate of survival for the fruit tree varieties was 97 per cent compared with 54 per cent for the ornamentals.

Trickle Irrigation for Turf

In this project a double-walled tubing type of lateral pipe was buried in the ground before 5,500 square feet of lawn grass was seeded. Although difficulty was experienced with the type of tubing selected, it has been established that a subsurface installation, three to four inches deep, and spaced two and a half to three feet apart, is satisfactory for irrigating lawn grass in medium textured soil. The researchers still have to determine whether deeper and wider spacings would also be suitable for irrigating turf grass,and to test better quality tubing for burying in the ground.

Trickle Irrigation for Landscape Areas

A small landscape irrigation system, tested over two years, functioned satisfactorily. However, it was necessary to bury all the parts, except the emission points. To avoid damage during landscape maintenance.

Trickle Irrigation for Saskatoon Orchard

In this demonstration project near Fairview, three different kinds of lateral systems are being used. Two are double-walled types and the other is an emitter type. All have been laid on the surface of the ground. In spite of a limited supply of irrigation water, the systems have worked very well to overcome periodic moisture deficiencies because of their high application efficiency.

Trickle Irrigation for Greenhouses

It appears that porous tubing and double-walled tubing are best suited to greenhouse irrigation except in the case of bench culture. Local information has not been obtained for adapting trickle irrigation to bench culture, but literature indicates that foggers and microtubes are alternatives to some of the presently used overhead sprinkler methods.

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Trickle Irrigation (cont'd)

Mr. Spiess says trickle irrigation is suitable for the following uses in Alberta.

- Market and Home Gardens - The best systems appear to be the porous tubing type, installed below the soil surface, and the double-walled type, installed either above or below the ground. Mr. Spiess points out that cultural practices should be adjusted to allow one lateral to supply the water for two closely-spaced rows.

- Nurseries - It is conceivable that all types of trickle irrigation could be used under different circumstances because of the variations in plant size, density and arrangement. The double-walled and porous type laterals are best suited to closely-spaced row plantings, while laterals with emitters, spaced to suit the plantings, are better for wider-spaced rows.

- Shelterbelts - The emitter-type trickle system, buried in the ground, except for the emission points, is recommended for widely spaced trees and shrubs in a shelterbelt. Large trees may require two or more emission points. Hedges and continuous plantings could be irrigated with buried porous tubing or suitable double-walled tubing.

- Lawns - Buried, porous tubing appears to work best for lawn irrigation. However, more information regarding depth, spacing and product life is still needed.

- Small Fruits - Double-walled and porous tube-type laterals, buried shallowly in the bed, are recommended for strawberry irrigation. One or two laterals per bed may be required, depending upon the width of the bed and the type of soil. Raspberries can be irrigated with equipment similar to that recommended for continuous shelterbelt plantings.

Mr. Spiess says, "Although a considerable amount has been learned about trickle irrigation in general, and about some of the systems in particular, there is a need for continued field testing if we are to remain in the forefront on this subject. The main reasons are the continual development of equipment and the ever-increasing value placed on our water resources. Given this situation, future applied research will probably involve field testing and evaluating trickle irrigation systems which appear to be best suited to Alberta conditions."

Two publications entitled "Trickle Irrigation" and "Trickle Irrigation for Home Gardens and Shelterbelts" are available from the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton, T5K 2C8.

August 22, 1977

FOR IMMEDIATE RELEASE

NUMBER OF ALBERTA FARMS DROPPING

Figures recently released in the 1976 federal census show that there were 57,310 farms in Alberta last year compared with 62,702 in 1971.

During the same period, the average acreage per farm increased to 864 acres from 790 acres, and the average number of cropped acres increased to 328 acres from 289 acres.

The total wheat acreage for the province increased dramatically over the five-year period to 5,542,874 from 3,443,311 acres. Oats and barley stayed about the same as they were in 1971, while the rapeseed acreage dropped to 739,825 from 1,987,625.

The average acreage per farm devoted to pasture increased to 56 acres in 1976 compared with 44 acres five years earlier.

Cattle numbers increased to 4,603,056 last year from 3,702,125 in 1971. During the same period, hog numbers decreased to 876,283 from 1,185,539 and sheep numbers decreased to 187,403 from 244,926.

The number of cars on farms increased to 52,205 in 1976 compared with 51,564 in 1971; the number of trucks increased to 109,694 from 93,471 and the number of tractors increased to 116,316 from 111,256.

The census data also indicated that the average age of Alberta farmers may be shifting from one age group to another. In 1971, 30.5 per cent of the farmers in this province were over 55 years of age and 16.7 per cent were under 35. In 1976, 29 per cent were over 55 years and 19.6 per cent under 35.

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August 22, 1977

FOR IMMEDIATE RELEASE

ALBERTA SHEEP TEST STATION SALE RESULTS

The sale price of rams at this year's Alberta Sheep Test Station Sale at the Hereford Centre in Innisfail was slightly higher than last year.

Thirty-three rams sold for an average price of $244, which is up by $13 per head over last year. The top selling animal, owned by Sudon Farms of Wetaskiwin, was purchased for $500 by Chester Fowler of Airdrie.

The average price of the 20 ewe lambs sold at the sale was $164.25. Only three ewes were sold last year, and their average price was $190. The top selling ewe lamb at this year's sale was owned by Tom Reed of Edmonton and was purchased by Dan Hays of Calgary for $210.

The total value of the 53 rams and ewes sold at the Alberta Sheep Test Station Sale was $11,345. Don Scheer, livestock supervisor with Alberta Agriculture, said he was pleased with the sale results, and that the good selling prices for both rams and ewes indicate producer-confidence in the industry.

Alberta Agriculture, in co-operation with the Alberta Sheep and Wool Commission, holds a public auction sale every year of the top-performing rams and ewes from the sheep test station, where these animals are evaluated and their rate of gain indexed. The record of performance of each animal is measured in a manner similar to that used by the federal-provincial record of performance home test.

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August 22, 1977

FOR IMMEDIATE RELEASE

THE ADVANTAGE OF TESTING FEED

Although the results of feed testing and of well-balanced, economical rations may not be as immediately apparent as some other management practices, they can be very significant in terms of economics.

Why Test Feeds

Feed testing is important because the composition of feeds is highly variable. Forages, for example, vary in quality according to species, their stage of maturity when cut, leaf loss during harvesting and weathering. The quality of grains varies according to the area in which they are grown, the level of soil fertility and the variety used. Even different types of straw vary widely in quality. The species, variety and cutting date all affect the protein and energy contents of straw.

Alberta Agriculture's animal nutritionist, Dr. Jerome Martin, reports that average nutrient requirements for animals of various weights, and producing at various levels, are available in published form,and that rations can be formulated from feed analysis results to fit these requirements.

When Should Feed Be Tested

Dr. Martin recommends taking forage samples as soon as the hay is in stacks or in large, round bales. He points out that the analysis will not change much between the time the samples are taken and the time the feed is fed. "Unfortunately, most livestock producers in Alberta wait until they are ready to start their winter feeding programs before submitting their samples," he says. "The result is overloaded laboratories and annoying delays."

In the case of silage pits that contain a wide variety of forages which cannot be easily sampled when the pit is full, it is a good idea to take a representative sample of the feed as it is going into the pit. The material should be frozen and can be sent by bus to the Alberta Soil and Feed Testing Laboratory in Edmonton. According to Dr. Martin, if the fermentation process proceeds normally, there will be little, if any, change in the analysis after storage, except for the pH (acidity) value.

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The Advantages of Testing Feed (cont'd)

Since sampling grain from a full bin is difficult, Dr. Martin suggests putting a five-gallon pail beside the auger and taking a few handfuls of grain from each truckload as the bin is being filled and putting them into the pail. When the bin is full, mix the grain in the pail and send a sample of it to the Alberta Soil and Feed Testing Laboratory. There are also a number of private laboratories in the province that do feed testing.

Depending upon the time of year, the "turn-around time" for samples submitted to the Alberta Soil and Feed Testing Laboratory varies from one to three weeks. Samples that are submitted during the haying or harvesting season are usually back within two weeks. In addition to making it possible to plan rations early for winter feeding programs, analysis results are useful for anybody selling hay or grain and for those buying feed. If the feed is of high quality, it may be worth a premium. Low quality feeds may best be left to the undiscriminating buyer.

When feed samples sent for analysis are accompanied by detailed information on the animals to be fed, the management system being used etc, the results will include ration recommendations.

Sampling kits, including information sheets for beef cattle, dairy cattle, sheep, swine and horses, are available from all district agriculturists.

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IMPORTANT NOTICE

Re: Annual Flower and Woody Ornamental Trials (page 15 of August 15 issue of "Agri-News").

The University of Alberta's Department of Plant Science has cancelled its horticultural open house field day, scheduled to take place at its Parkland farm in Edmonton on August 21.

August 22, 1977

FOR IMMEDIATE RELEASE

PAMI RELEASES REPORTS ON ROUND BALERS AND ROUND BALE HANDLERS

The Prairie Agricultural Machinery Institute (PAMI) has released evaluation reports on four round balers and five bale handlers.

The baler reports outline functional performance and operating characteristics in a variety of crop conditions. Typical capacities, power requirements, hay losses, bale densities, and other characteristics are discussed.

Dave Kelly, project technologist in charge of haying equipment says, "Depending on the crop, capacities ranged from about 5 to 13 tons per hour, with pickup losses ranging from 7 to 11 per cent and bale chamber losses ranging from 10 to 17 per cent. Losses vary considerably with hay moisture content."

The baler reports released cover the Hesston 5800, John Deere 500, New Holland 850 and McKee 1500 balers. Four additional balers, including two ground-roll models, are being evaluated by PAMI this summer.

Bale handler reports include models designed for handling four, five and eight bales. Models covered are the Hesston 5200, Farmhand F126-B, New Holland 85, MacDonald Bros. 608, and McKee Bale-rustler.

The bale handlers use various methods of loading and unloading. Some models load and unload the bale without altering its orientation, while others turned the bale over in handling and placing. This factor and the amount of disturbance to the bale shell are important considerations for outdoor storage.

The above evaluation reports are being distributed to people on the PAMI mailing list. Anyone interested in receiving reports or in being placed on the mailing list should contact the Prairie Agricultural Machinery Institute at Humboldt, Lethbridge, or Portage la Prairie.

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FOR IMMEDIATE RELEASE

ALBERTA DAIRY EXCHANGEES IN JAPAN

"We went to our first dairy show this week and showed three heifers. They let me show two, and we won a championship and a third prize. Of course everyone was happy, so we had quite a good party for about a day. We were all a bit late in getting up for milking the next day!"

The above is an excerpt from a letter received by Alberta Agriculture's associate director of extension, Charlie Cheshire, from Martin Wuthrich, a graduate of Fairview College from Fort St. John, British Columbia, who joined five young Alberta dairy farmers who went to Japan last spring under the Alberta-Hokkaido Dairy Exchange Program. The five Albertans are Rita Marie Shank of Athabasca, Henry Lange of Grande Prairie, Neil French of Edmonton, Garth Rowswell of Edmonton and James Davin of Tofield.

Dairy herds in Hokkaido, Japan's most northerly island, supply the rest of the country with most of its milk and dairy products. They vary in size from 10 to 80 head, with the average being around 25.

Labor is relatively cheap in Japan but feed is expensive. Dairy rations in that country contain a greater variety of feeds than is usually the case in Alberta, and most Japanese dairymen buy all their feed except for their hay and silage. The cows are usually kept in a small paddock behind the barn, and fed concentrates and forage all the year round.

All Japanese dairy cows are bred by artificial insemination, and most of the semen comes from Canada. Because the majority of the better cows are sired by Canadian bulls, their milk production and butterfat levels are similar to those in Canada. Japanese dairy farmers receive a high government milk subsidity to encourage expansion of the industry.

Initiated in 1973, the Alberta-Hokkaido Dairy Exchange Program provides for 10 young Alberta dairy farmers to go to Japan and for 10 young Japanese dairy farmers to come to Alberta every year. Participants live with the family on whose farm they are working and usually stay in the host country for about 12 months. At the present time there are 12 Japanese dairymen working on 10 Alberta dairy farms. Two more exchangees, a university student in agricultural economics and a professor in veterinary science, are expected later this year.

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FOR IMMEDIATE RELEASE

THE SUCCESSFUL PRODUCTION OF FRUIT WINES

by G. Mazza, Food Scientist
Alberta Horticultural Research Center
Brooks, Alberta

The term fruit wine refers to wines made from fruits other than grapes. The three main groups of fruit wines are: stone fruits, such as cherries, plums, peaches and apricots; pome fruits, such as apples and pears, and berry fruits such as raspberries, blueberries, blackberries, gooseberries, strawberries, currants and saskatoons.

The procedure used for making grape wine has to be modified for making fruit wines because the sugar content of these fruits is generally low and their acid content is high. The climatic conditions under which they are grown are unfavorable to the development of sugar. Some fruits also have only a little juice and contain less natural yeast nutrients than grapes.

The most difficult part of making fruit wines is to retain the flavor of the original fruit. Strict adherence to the following points is necessary to produce a high quality fruit wine.

Selection of Fruit - Select only sound fruit that is rich in flavor. Ripe, and sometimes even slightly overripe, fruit should be used for fruit wine because the flavor of most fruit is developed at the peak of maturity. Very overripe fruit, spoiled fruit and immature fruit should never be used.

Selection of Yeast - In contrast to grape wines, where the yeast is partly responsible for the flavor, the flavor of a fruit wine is mainly derived from the flavor of the fruit. However, more of the fruit's natural flavor is retained when a yeast is used that ferments rapidly and well at low temperatures. Such yeast strains as Champagne and Burgandy are recommended for fruit wines.

Equipment - Only glass, stainless steel, plastic and earthenware containers should be used for wine making. Earthenware crocks are the most convenient for fermenting pulp fruits, while glass and plastic carboys (type of jug) are the best for fermenting juice. The narrow neck of the carboy makes it possible to use a fermentation lock which allows carbon dioxide gas to escape from the fermented material and prevents air and fruit flies from getting into the wine. These inexpensive locks can be purchased at most wine supply stores. It is possible to make a lock by passing

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The Successful Production of Fruit Wines (cont'd)

a tube through the stopper on the container and attaching a small piece of hose to it. The end of the hose should be submerged in water or a mild solution of metabisulfite.

Clean equipment is essential for preventing unwanted odors and flavors. If wooden barrels are used for starting wine, they should be free of musty or vinegary odors caused by molds and bacteria.

Yeast Nutrients - It is necessary to add some yeast nutrients at the beginning of the fermentation process of fruit wines because most of them contain less natural yeast nutrients than grapes, and because the crushed fruit or juice is frequently diluted with water to promote rapid fermentation. These nutrients are available from wine equipment suppliers. If, for some reason, it is not possible to get them, a good substitute is malt extract. Add one teaspoonful to each gallon of juice or pulp.

Initial Sugar Content - A high initial sugar content is detrimental to the fermentation of fruit wines because it slows down the rate of fermentation and prevents a good start. For a rapid start and a steady fermentation, the initial sugar content should not exceed 16 per cent. If sugar is added to the fruit or juice, it is important that the total sugar content be kept below 16 per cent. The addition of sugar after the fermentation has had a good start is recommended.

Sulphur Dioxide - Excessive use of sulphur dioxide should be avoided in the fermentation of fruit wines because too much of it will inhibit the yeast activity, and, thereby, slow down the process. It will also impair delicate fruit flavors and bleach dark-colored wines. However, in many cases, the use of a moderate amount of sulphur dioxide is beneficial for maintaining the general quality of fruit wine. About 100 parts per million is recommended.

Fermentation Temperature - It is generally believed that the final flavor of a fruit wine is derived from the fruit itself and from the chemical development that takes place during and after fermentation. In both cases temperature is important. A low temperature fermentation will retain more fruit flavor, but if it is too low, it will slow the rate of fermentation. A temperature of about 20 ^{o} C. is considered satisfactory for fermenting fruit wines.

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The SuccessfulProduction of Fruit Wines (cont'd)

Aeration - The fermenting pulp and juice should be aerated or stirred to increase the yeast activity and to prevent micro-organisms, particularly those that turn alcohol into acetic acid, from spoiling the wine when the fruit pulp rises to the top to form a "cap". Aeration is not necessary during the first one or two days of fermentation when a considerable amount of dissolved oxygen is present in the fruit pulp and the "cap" is thin, but after three or four days of fermentation the cap must be broken by stirring. The frequency of aeration will depend upon the fermentation condition in progress. In some cases, three or four aerations a day may be necessary.

Racking - Wine should be racked or syphoned off from the sediment with a rubber or plastic hose into a clean carboy when the fermentation has been completed,and the yeast has settled on the bottom of the container. This operation should be repeated at intervals until no more sediment forms (never pour the wine off). Bad odors and flavors will develop if the wine is allowed to set on the lees (yeast deposit).

Bottling - Bottling should be done when the wine is clear and fermentation has ceased; never before. If sugar syrup is used to sweeten the wine when bottling, stabilizer tablets should be used or the wine should be pasteurized to prevent renewed fermentation. The tablets can be purchased at any wine supply store,and the recommended rate is three tablets per gallon of wine.

To pasteurize the wine, place the loosely capped bottles in warm water, and heat the wine to 72^{o} C. When this temperature has been reached, take the bottles out of the water. Make sure they are full, and tighten the caps while the wine is still hot.

Aging - Six months to a year is the recommended aging time for fruit wines. A long period of aging, normally considered necessary for many grape wines, is detrimental to fruit wines because it causes a loss of flavor and aroma and a change in color. Some fruit wines have been sold after only three months of aging, but this is exceptional. At least six months of aging is normally required to mellow the harsh taste of fruit wines,and to produce a balanced flavor and a smooth texture.

August 22, 1977

FOR IMMEDIATE RELEASE

ENCOURAGEMENT

by Nadine Vester
Alberta Agriculture's Family Living Specialist

A misbehaving child is a discouraged child. A discouraged child does not feel good about himself; we say he lacks self-esteem. So says Dr. Rudolf Dreikurs in his book "Children: The Challenge".

Many of us were raised to believe that we should not tell our children how special we think they are lest they become conceited. The dictionary defines conceited as having too high an opinion of oneself. Have you ever known anyone who truly thought too highly of himself? Most conceited behaviour is an act to mask self-doubts.

Let us look at some ways of telling our kids how special they are or of "encouraging" them, to use Dr. Dreikurs' word. A child is born with a desire to learn, to become skillful, to be useful. He also comes equipped with a desire to please those on whom he is dependent. So, we have a racer already in motion; we just have to learn to steer him and to apply the brakes occasionally. Braking is "discipline". Right now we will concentrate on the steering.

First, never do for your child what he can do for himself. If in doubt, let him try. Mistakes are learning experiences. Show him alternatives if he is having difficulties. "Maybe you could tuck in the sheet like this before putting on the blanket." "Perhaps you might try doing the bottom button first and working up." "I know you are frustrated, perhaps if we did it together - - -." Since children learn by imitation, they need to have opportunities to watch you and to practice. Yes, this takes time.

Then, tell your child what he did right. Do not make vague pleased noises, "Isn't that a good boy, aren't you clever?" - that tells him you are pleased, but about what? Say, "You really made that pillow fluffy and soft when you plumped it;" "You got all the covers off the floor and onto the bed;" "The bedspread really covers the bed now" (never mind the lumps); "Since the bowls have been washed, we can make that cake;" Notice any improvement, any progress, however small, and comment - - - do not assume he can read your mind!

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Encouragement (cont'd)

Now let us look at some discouraging messages. "Why can't you be more careful?" (he would if he could.); "You never finish anything you start;" "Your eyes are bigger than your stomach;" "Why must you be so clumsy;" "You are so lazy - - -, when I was your age, I had to milk six cows;" "You missed this spot" (ignoring the rest of the shiny clean floor); "Let Mom do it for you;" "Hi, Fatso" or "Hi, Skinny'or "Hi, Bugs Bunny" - - - any nickname based on a negative characteristic is a put-down. Most teasing is hostile; just listen the next time you hear teasing, and you will hear the victim defending himself.

B. F. Skinner taught pigeons to play ping-pong by rewarding the behaviour he wanted them to repeat. Take a hint from him and tell your child what he is doing right. Tell him how wonderful he is. It is good for him.

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FOR IMMEDIATE RELEASE

NEW SWINE ROP STATION OPENS

An Agriculture Canada swine record of performance (ROP) test station has been opened at Nisku, 15 miles south of Edmonton. It replaced the first Canadian swine ROP test station which was built at Edmonton in 1937.

The new facility, which has the capacity to performance test 576 boars per year, is adjacent to Alberta Agriculture's swine artificial insemination (AI) centre, which is presently under construction. The AI program is being designed to make more intensive use of boars selected through recognized ROP programs.

Sam Harbison, Alberta Agriculture's supervisor of swine breeding, reports that the new ROP station has exercise pens to condition boars that are selected from the test to be sold as breeding animals. Twenty-three of the boars which had completed their test at the Edmonton facility were sold by action following the opening of the Nisku test station.

Mr. Harbison says the first 48 pens of the new test station, each of which holds two litter-mates, will be filled by September 15.

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FOR IMMEDIATE RELEASE

RAPESEED PRICE PROSPECTS

A number of farmers have called Alberta Agriculture asking whether they should hold their new rapeseed crop or sell as much as they are allowed to sell under their 1977 quota.

Lynn Malmberg of the marketing intelligence branch says, "We are in favor of selling as much rapeseed as possible at current price levels because the odds are that things will get worse as far as prices are concerned before they get better."

He does not expect soybean prices to improve and is almost certain that the U.S. crush will increase sharply as the fall progresses. Hence, there is a good chance of $5 rapeseed futures prices, which would mean elevator prices of $4.50 or less. Rapeseed elevator prices are usually 50¢ to 80¢ per bushel lower than the futures price. November rapeseed futures are currently just under $6 per bushel, while November soybean futures are just over $5.

The soybean crush has been relatively slow in the last couple of months, mainly because the old soybean crop supplies are relatively tight, and crushers have chosen to wait for the new crop to be harvested. Hence, both soybean meal and soybean oil prices are probably higher than they will be when the U.S. bean harvest begins in earnest and the crush accelerates. As oil and meal prices fall and the rapeseed harvest begins, rapeseed prices can easily fall below those of soybeans.

Mr. Malmberg thinks that rapeseed prices could strengthen again towards spring, depending upon U.S. soybean consumption, whether or not there are any large sales to China or the U.S.S.R., and the progress of the Brazillian crop, which will be seeded shortly.

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Alberta

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FOR IMMEDIATE RELEASE

SLEEPING SICKNESS NOT SERIOUS IN ALBERTA

Only eight suspected cases of sleeping sickness (western encephalitis) in horses have been reported to Alberta Agriculture's veterinary services laboratories this season.

The director of the veterinary services division, Dr. H.N. Vance, says it is very unlikely that an outbreak of the disease will occur in Alberta this year. The problem vanishes when the mosquitoes vanish with the first sharp frost. The mosquitoes transmit sleeping sickness from wild birds to horses and even to human beings, but they do not transmit it from an infected horse to a human being.

The recommended time to vaccinate horses against sleeping sickness, and all valuable animals should be done every year, is in the spring. Although they can be vaccinated at any time of the year, it is unlikely that vaccinating now will be worthwhile because the real threat from this disease comes in June, July and August. "If an animal is going to get sleeping sickness," says Dr. Vance, "the chances are it will have already got it by this time of year. The incubation period for sleeping sickness in horses is from one to two weeks."

Drowsiness is the most common symptom. However, horses can also have trouble walking. They may stagger and even go down. Only about 15 per cent of horses with sleeping sickness die, but the nervous systems of the others are usually permanently affected.

The last severe outbreak of sleeping sickness in Alberta was in 1965 when 338 horses contracted the disease. Last year there were only seven cases.

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FOR IMMEDIATE RELEASE

FABABEANS AS A SOURCE OF NITROGEN

Fababeans probably constitute the most effective nitrogen fixing crop being grown in the world today.

This statement was made by Alberta Agriculture's forage crops specialist, Larry Gareau. He points out that the serious effect the energy crisis is having on both the supply and price of nitrogen fertilizers is resulting in widespread interest in crops that require little, or no, nitrogen fertilizer, and which replenish the supply of nitrogen in the soil. In 1972 worldwide production of ammonia was estimated to require the equivalent of about 800,000 barrels of oil per day.

Fababeans is a legume which hosts the rhizobium-type bacteria that use atmospheric nitrogen to produce nodules on the roots of plants. The nodules release ammonia and nitrate nitrogen into the soil for use by the host plants and by the subsequent crop.

Studies carried out by research workers in Western Canada show that the rate at which fababeans fix atmospheric nitrogen can be as high as 300 pounds per acre in one year. "If we get a fababean yield of five tons of dry matter per acre with a protein content of 15 per cent;" says Mr. Gareau, "we are getting 1,500 pounds of protein per acre compared with approximately 600 pounds from the average grain crop."

Assuming 6 1/4 pounds of protein is equal to one pound of nitrogen, this 1,500 pounds of protein represents about 240 pounds of nitrogen per acre, excluding that contained in the stubble and plant roots. Since the stubble and roots would contain at least 25 per cent of that contained in the harvested crop, the amount of nitrogen left in the soil would be about 60 pounds per acre.

Work carried out by University of Manitoba scientists at Glenlea, Manitoba, has shown that unfertilized wheat crops grown on land that was seeded to fababeans the previous year will produce yields equivalent to those obtained from wheat grown on wheat stubble with an application of 50 pounds of nitrogen fertilizer.

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Alberta

Fababeans as a Source of Nitrogen (cont'd)

According to Mr. Gareau, about 17,000 acres of fababeans are being grown in Alberta this year, mainly for silage. Presently grown fababean varieties do not mature early enough in this climate to ensure a seed crop. "The main reason that the fababean acreage in the province is not larger," says Mr. Gareau, "is probably because seeding costs are high compared with those other crops. It requires a seeding rate of at least 150 pounds per acre and many farmers are not prepared to risk this investment. However, this situation could easily change in view of the probable introduction of earlier maturing varieties and the impending nitrogen shortage."

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FOR IMMEDIATE RELEASE

HOG SURVEY RESULTS

A survey, carried out earlier this year in central and south-central Alberta by the provincial department of agriculture, shows that the breakeven price for hogs in March was estimated to be about $50 per hundredweight.

The survey to which about 10 per cent of the swine producers in the Red Deer, Calgary and Stettler areas replied also showed that, on the average, 719 pounds of feed are required to grow and finish a 200-pound hog, and that sows consume 2,306 pounds of feed per head per year. An average of 14.2 pigs were marketed annually per breeding sow by those who participated in the survey.

Production problems mentioned by the survey participants in declining order of incidence were: buildings, breeding, disease, marketing, nutrition and management. The survey showed that "specialized" hog farms, where more than 50 per cent of the income is derived from hogs, were similar in size and efficiency to non-specialized operations.

An increase of 18 per cent or more in the number of pigs that will be marketed this year was projected by those who replied to the survey. About 30 per cent of the participants plan to expand their operations in the future, 11 per cent plan to cut back on production and 45 per cent plan to retain their present level production.

Further information and copies of the survey report can be obtained from Fred Schuld, Regional Swine Specialist, Alberta Agriculture, Box 5002, Red Deer, T4N 5Y5.

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FOR IMMEDIATE RELEASE

A COMPUTER SIMULATION MODEL FOR SHEEP PRODUCTION

A computer simulation model has been developed at the federal research station at Lethbridge to compare various systems of sheep production.

According to Dr. B. H. Sonntag, economist at the station, the model contains production systems ranging from conventional range-based single-lamb crop systems to confinement systems that produce more than one lamb crop a year. It considers such factors in the various systems as labor requirements; investments in buildings, land and equipment as well as 'input' costs and product prices; and it is based on the many breeding, nutrition and management experiments that have been carried out at the station.

At the Lethbridge station the model is being used to compare the economic effects of such variables as conception rates, mortality rates and feed conversion. "We expect to find factors that are economically important and deserve further investigation," says Dr. Sonntag.

Alberta Agriculture's sheep specialist, Don Scheer, says he would like to see the simulation model made available to sheep producers in this province. In the meantime, anybody who would like more information on the model, or who is interested in using it, should contact Dr. B. H. Sonntag, Economics Section, Lethbridge Research Station, Lethbridge.

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FOR IMMEDIATE RELEASE

BEWARE OF SOIL EROSION

Dry weather and poor crop growth in many parts of central and southern Alberta have combined to leave the soil very vulnerable to soil erosion. This situation is particularly true of the chinook belt.

John Hermans, soil conservation specialist with Alberta Agriculture, reports that many fields in central and southern Alberta have drifted badly during the last couple of winters. "Judging by the lack of preparations to prevent the soil from drifting, the situation must have taken many farmers by surprise," he says. He urges farmers in these areas and in areas of the province that received little moisture this summer to take preventative measures now.

He recommends the following measures.

- Keep fall tillage to a minimum. This will help maintain a soil structure that is less susceptible to erosion (i.e. large clods) than pulverized soil.
- Keep tillage operations for fall herbicides to a minimum. This means soil conservation should receive priority at this time of year over weed control.
- Orient tillage operations so that the furrows run perpendicular to prevailing winds.
- Maintain as much trash cover as possible.
- Plant cover crops such as winter wheat, fall rye or oats. Information on recommended varieties can be obtained from district agriculturists.

"Good top soil," says Mr. Hermans, "is the most valuable asset on any farm, but it is worthless when it has been eroded into ditches or onto neighboring fields. Since few emergency methods will halt erosion once a field begins to blow, prevention is by far the best approach."

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FOR IMMEDIATE RELEASE

ANOTHER WAY TO CONTROL BEES

Vibrating honey bee hives may be a way of overcoming some of the difficulties connected with using bees to pollinate crops in commercial greenhouses

According to United States Department of Agriculture research results, people who are afraid of bee stings can turn on vibration-producing equipment and, after a quarter to a half an hour, enter a greenhouse with little risk of being stung. Also, when insecticides are applied to the greenhouse crops, the hive can be vibrated and removed until it is safe for the bees to be returned to the greenhouse.

Agricultural Research Service entomologist Hayward Spangler (Bee Research Laboratory, 2000 E. Allen Road, Tucson, AZ 85719) says that vibrating the hive at 600 cycles per second dramatically reduces bee activity, including flying. The reduced flying results in a rapid reduction in the number of bees away from the hive because the returning foragers are "frozen" when they re-enter the hive.

Dr. Spangler worked a single frame (comb) observation hive containing about 2,000 bees in polyethylene greenhouses for more than six months with no obvious harm to the bees. The bees were fed pollen and sugar syrup to maintain the brood level. During the six-month period the bees made enough visits to the tomatoes, onions and alfalfa blossoms to pollinate them.

Dr. Spangler induced vibrations in bee hives with a sound reproducer driven by an audio amplifier connected to a signal generator. The sound reproducer was installed in the frame near the hive entrance with a screw which transmitted vibrations from the reproducer to the frame.

Alberta Agriculture's supervisor of apiculture, Dr. Ulf Soehngen, explains that while bees can perceive and react to a certain range of sound waves (vibrations) in the surface on which they are standing (i.e. the comb and hive walls), they are not able to perceive airborne sounds. "The fact that sound waves do not affect the bees while they are

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Another Way To Control Bees (cont'd)

flying accounts for the time it takes to clear the air of them", he says.

Dr. Soehngen says a report he read some years ago indicates that while the vibration method of controlling bees may be workable in a small, confined space, it appears to be impractical in the field. This is because of the large equipment that would be needed and the fact that the operator would have to wear some kind of ear protection to shield him from the discomfort caused by the sound waves.

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FOR IMMEDIATE RELEASE

COMMUNITY DEVELOPMENT IN RURAL SOUTHERN ALBERTA

In recent years "regional" or "multi-county" organizations have become important vehicles for finding ways and means of tackling the social, economic and political problems and opportunities in rural communities. There has been a growing need to co-operate in multi-county planning and development programs due to the realization that not all counties can achieve their goals independently. A deliberate attempt by organized groups in different communities to work together in "multi-county" organizations, emphasizing the potential areas of co-operation, would increase their mutual interdependence and their effectiveness in making and implementing decisions and in exploring ways of making more effective use of regional resources.

Through the exercise of mutually agreed endeavors, community leaders, and community action groups, come to recognize and appreciate the value of reciprocal relationships. They also benefit from each other's prior experiences, identify felt-needs, and set priorities through a concensus to insure orderly and efficient resource use for the betterment of their communities. Such interaction and communication among leaders and groups also ensure that growth in one locality will not be at the expense of another locality.

Thus, the selection of activities in community development would be co-ordinated and linked with a greater emphasis on regional development. There is a great potential for social and economic interaction in the Crows Nest area and in many rural communities in southern Alberta, which would allow these communities to achieve their goals collectively rather than to rely on inadequate internal resources alone.

There is a need for community development research to supply information on problems as well as opportunities of which a community may have been unaware. This type of research program may select those activities which give tangible results and have a high degree of success in the short and long-run. They can also evaluate the existing government on locally initiated community programs, suggest alternative projects to determine the priorities of each locality against the background of the political, cultural and economic characteristics of each community.

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Community Development in Rural Southern Alberta (cont'd)

Such organizations need assistance in the form of training, consultation and financing to carry out research and selected programs. Advisory government services, leadership courses and seminars, adult education and other assistance are needed to broaden the interest of participants in the decision making process, and in the implementation of these decisions.

The disturbing impression that one carries away from small communities is that so many have become so dependent on external guidelines and financial resources to solve their problems and to obtain those social services that could be obtained through local initiative and leadership, as well as by utilizing resources from both inside and outside the community. Many southern Alberta communities, for instance, could bring about a revival of activity by developing their touristic potentials, which have been inadequately exploited. More effective and widespread use of recreational areas for botn rural and urban population would encourage a greater appreciation of the natural environment.

The above is an excerpt from an article by Dr. Bahir Bilgin of the University of Lethbridge on the need for the better use of human resources, and the implementation of certain programs to enhance the relative advantage of rural areas as a place to live and work. Entitled "Community Development in Rural Southern Alberta", the article is based on a field study and interviews. It appraises the importance of community development in a regional or multi-county setting.

Copies of "Community Development in Rural Southern Alberta" can be obtained from Dr. Bahir Bilgin, Associate Professor of Economics, University of Lethbridge, 4401 University Drive, Lethbridge, Alberta, T1K 3M4.

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FOR IMMEDIATE RELEASE

FALL INSECT CONTROL

This is the time of year when strawberry root weevils like to invade our homes.

About a quarter of an inch long and wingless, large numbers of these black beetles often try to move into homes for the winter. Although they are harmless, and are not usually around for more than two or three weeks, they can, nevertheless, be quite a nuisance during their migration period.

According to Alberta Agriculture entomologists, the best way to deal with these insects is to fill all the small cracks and holes around windows, doors etc., so that they cannot get into the house. However, if you find that you cannot live with them for the few weeks they are around, you can use malathion (if the temperature is above 20° C.) or chlordane to control them. Spray a two to three-foot area of ground around the foundation of the house and spray three feet up the foundation wall.

Garden Slugs

If garden slugs are still causing problems, there are several things you can do to control these greyish-brown, slimy, legless creatures that are about half an inch long. You can lay boards on the ground in the area you want to protect. If you check under these boards each morning, you can kill the slugs that have gathered there. You can also use fly screening to protect special plants. Place it around the plant,or plants,and bury the bottom edge in the soil.

If the above suggestions are not practical, you can buy a commercial preparation containing metaldehyde for controlling garden slugs. These preparations are available in bait, pellet and spray form.

Pear Slugs

The pear slug is another garden pest that is common at this time of year. Resembling a tiny, black blob of jelly that is about three-eighths of an inch long, they attack the leaves of cotoneasters, hawthorns, mountain ash, pin cherries and fruit trees. The damaged leaves look as if they have been scorched,and may drop from the tree prematurely.

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Fall Insect Control (cont'd)

A stream of water under strong pressure will usually dislodge pear slugs from the leaves of shrubs and trees. If, however, the infestation and the damage are severe, you can spray or dust with rotenone, pyrethrum, malathion (if the temperature is above 20°C.) or carbaryl.

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FOR IMMEDIATE RELEASE

"NORMA JEAN GRAY AWARD"

A scholarship has been established in the name of Norma Jean Gray in recognition of her work during the past 33 years as a home economist with Alberta Agriculture.

This non-academic award is to be given to an Alberta 4-H member for reliability, integrity, industriousness, communicative skills and a sense of public responsibility. It can be used at any post-secondary educational institution.

Contributions are invited from people who have known and appreciated Mrs. Gray's work. They are tax deductible and should be sent to:

"Norma Jean Gray Scholarship"
c/o Administrator, Students Award Office
University of Alberta
Edmonton, Alberta
T2G 2E1

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FOR IMMEDIATE RELEASE

DISCIPLINE BY CONSEQUENCES

by Nadine Vester
Alberta Agriculture's Family Living Specialist

A parent's goal is not the raising of an obedient child. What manner of adult grows from a child who obeys promptly? Did someone say "a robot"?

If not obedience, what should we aim for? We should aim for a child who co-operates with the demands of the situation, and the "maintenance of order", according to Dr. Rudolf Dreikurs in "Children: The Challenge".

"We cannot let the kids run wild," you say; after all, "spare the rod and spoil the child." What about spanking? The results are unpredictable. It may make Mom and Dad feel better, but it is not guaranteed to change the child for the better. If it were, there would be less crime and deliquency in the world. Punishment may teach the child to stop, or it may teach him to fear his parents, and to be more careful next time not to get caught.

If spanking does not work what can we do? Sometimes, the most effective action we can take is no action. Let reality happen. For example, the natural consequence of not eating is hunger. A junior high school has a problem about the use of the telephone. Forty children are lined up every lunch hour to phone their parents to bring the lunches they forgot. If forty families said, "tough, your next meal is this evening," forty families would save gas and aggravation, and no child would starve. Mother did not forget the lunch, why should she be inconvenienced every lunch hour? Let the child take his own responsibility. "But that is mean," you say. On the contrary, it prepares the child for adulthood. Who picks up after you, bails you out, protects you from life?

Obviously, you cannot let a child learn not to run into the street by letting him get hit by a car. But you can use a logical consequence --- an action related to the behavior. For example,"If you can't stay inside the yard, you will have to come in." Then act.

Let's take a further look at natural consequences. Remember, natural consequences happen with no intervention from the parents. You touch a hot stove, it burns. You tease a dog, it bites. You decide to leave your raincoat home, you get wet. You play in puddles, your feet get wet.

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ıe by Consequences (cont'd)

camping in winter, you get cold (equipment is safer tested in the backyard). Obviously, must use their common sense to protect their children from serious injury, but too many ıt to protect them from any discomfort.

Logical consequences do not inevitably follow an act, but used calmly and logically, effective. Here are some examples: You do not put your bike away, someone steals it, and ıt earn the money for a new one. You spend your allowance on candy the first day, you e until next week. Dawdling leads to lateness, which leads to a detention. The dishes are not so mother cannot get supper.

Be creative in relating the consequences to the act, but never use a consequence you ive with. If your child is late and you ground him for a week, you will defeat your pur- is nagging and whining drives you to letting him out two days later. (That does not teach ome in on time; it teaches him to nag and whine).

A secret to successful child raising is to have few rules, make reasonable demands, and u say something, mean it. If it is not worth an action, it is not worth saying either. Ask "What are the demands of the situation?" Your goal should be tied to the situation; not ıestion of obedience.

A Hint: Be aware of what the child is learning. A group of grade nine girls were Vhen you lose a jacket, how many of you have parents who replace the jacket right away, ıey scold?" About two-thirds put up their hands. "What does that teach you?" One ·l in the back said "If you get tired of your old jacket, lose it, and you'll get a new one." uld she have learned if she had been allowed to experience the logical consequence?

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FOR IMMEDIATE RELEASE

CALGARY REGIONAL OFFICE MOVES TO AIRDRIE

Alberta Agriculture's Calgary regional office has moved from the J.J. Bowlan Building in Calgary to Airdrie. The mailing address in Airdrie is Bag Service No. 1, Airdrie, T0M 0B0.

The telephone number of regional agricultural staff is 948-5101. The telephone number of the veterinary laboratory is 948-5161. Anybody who wants to use the RITE system to reach these offices should call the RITE operator in Calgary and ask for Airdrie.

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FOR IMMEDIATE RELEASE

NEW LOCATION FOR ALBERTA AGRICULTURE'S RESOURCE ECONOMICS BRANCH

Alberta Agriculture's resource economics branch has moved from the Commonwealth Building to Room 330, Oxbridge Place, 9820 - 106 Street, Edmonton, T5K 2J6.

The telephone numbers are 427-4026 (main number for the branch), 427-4027, 427-4028, 427-4029 and 427-4030.

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